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ABSTRACT

Papers on art libraries and information services for the arts, which were presented at the 1983 International Federation of Library Associations (IFLA) conference, include: (1) "'I See All': Information Technology and the Universal Availability of Images" by Philip Pacey (United Kingdom); (2) "Online Databases in the Fine Arts" by Michael Rinehart (United States); (3) "State of Automation in Swiss Art Libraries: The General Situation" by Karl Jost (Switzerland); (4) "Computerisation in Swiss Art Libraries: State of the Art" by Jean-Pierre Dubouloz (Switzerland) (English translation by Morag Morton); (5) "Computer Applications to Slide Collections" by A. Zelda Richardson (United States); (6) "ARLIS/ANZ (Art Libraries Society/Australia New Zealand) and Art Libraries in the Antipodes" by Valerie Richards (New Zealand); (7) "The Art and Architecture Thesaurus Project" by Pat Molholt (United States); (8) "Information Technology & Visual Images: Some Trends & Developments" by Patrick Purcell and Henry Okun (United States); (9) "The Development, Management, and Preservation of Art and Architectural Microform Collections" by Paula Chiarmonte (United States); (10) "Online Databases for Architects and Designers" by Valerie J. Bradfield (United Kingdom); (11) "CeCILE: A Bibliographic Database for Design at the Pompidou Centre" by C. Mihailovic (France) (English translation by Ian Sheridan); (12) "Systeme Descriptif des Representations (A System for Describing Representational Art)" by Francois Garnier (France--paper in French); (13) "Universal Accessibility of Art Images and Information Technology" by Sven Sandstrom (Sweden); (14) "Art Libraries in the Federal Republic of Germany" by Thomas Lersch (West Germany); and (15) "Videodiscs and Art Documentation" by Janice Sorkow (United States). (ESR)

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"I See All": Information Technology and the Universal Availability of Images

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'We have come to the Picture Age, and the great Picture Book was bound to come. This is the first book of its kind'. Thus wrote Arthur Mee in his I See All: the World's First Picture Encyclopaedia, published in five volumes between 1928 and 1930 [1]. It contained '100,000 pictures of people, places, and things', and proclaimed itself to be the pictorial equivalent of the 'many attempts to put all knowledge into a single work'. Sets of I See All are still cherished in libraries which value pictures as information, and not least in art libraries which, in addition to providing illustrated encyclopaedias and many picture books, often maintain picture files to help satisfy the insatiable appetites of artists and art students for pictures of anything and everything, for artists are interested in the whole of the visible universe. A similar function is performed by picture collections in public libraries, and by commercial picture libraries and photo agencies which provide a service to professional picture searchers and help to meet the demand for pictures from publishers and the media[2]. All of these may, like I See All, aspire towards an impossible comprehensiveness; their staff are familiar with the experience of retrieving, on a client's behalf, an image of some rare or obscure animal or object, only to be told by the client that it will not do — the animal is not in the required pose or the object is viewed from the wrong angle! Thus the all-encompassing picture collection can never, ever, be big enough; it needs not just one image, but many different images, of everything in the world since the world began. Of course, any overview of available picture resources would also have to take into account a multitude of specialised image collections, and we should not forget, too, that every library is a picture library (unless it rigorously excludes illustrated books). And what about moving images, contained in libraries of stock-shots, in film libraries and film archives, and in video formats? Yet however hard we try, we can never catch up with reality — with the manifold richness of our growing universe, in which no two snowflakes are the same, and in which Nature, and humankind, endlessly create myriads of new images.

Our ability to reproduce and transmit increasing quantities of images (including, now, moving images) has been made possible by technological developments, notably printing and photography, the two technologies which combined in the production of I See All. Even as

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late as 1928, the technology involved in producing this wholly and heavily illustrated but otherwise conventional book, was worth remarking on. In the editor's own words,

> To put a hundred thousand pictures into such a convenient size and shape that their blocks of solid metal will all fit together like dominoes and be in alphabetical order is a miraculous achievement before which the editor who conceived the book bows down in admiration. Never before have so many engraver's blocks been made for a single work, and the mere handling of these hundred thousand little pieces of metal has been a problem exercising the ingenuity of the largest printing works in the British Isles.

And that was written at the dawn of the electronic age; as Arthur Mee went on to remark, 'tomorrow our eyes are to be at the ends of the Earth, for television is upon us'. Today, 100,000 images can easily and compactly be reproduced on colour microfiche; a collection of 100,000 slides is not unusually large, and swift access to its range of images can be assisted by computer; 100,000 images can be stored on a single videodisc, a format which can also store moving images. It is no longer fanciful to imagine oneself sitting in front of a screen, able to call up, from close at hand or from the other side of the world, innumerable still or moving images of almost anything.

But, as ever, are we not in danger of allowing our technological wizardry to cast a spell on us? Because something has become possible, it is not necessarily desirable. Although something has become possible, if it is not needed, then, in a world of scarce resources, it possibly ought not to be pursued. At least we should not allow enthusiasm to blind us to the limitations and pitfalls of any given project; on the contrary these must be taken into account in assessing its worth vis-à-vis human needs.

In a consideration of the availability of images by means of new technology, there are perhaps two major limiting factors to be borne in mind.

1. Images are limited in their ability to represent reality

At best, images which purport to represent reality do so only indirectly and partially. To make an image of something real is to tear that thing out of its context, to isolate its appearance from its other properties, perhaps to silence it, and certainly to diminish its capacity for telling the whole truth about itself by itself. At

worst, images which purport to represent reality are deliberate lies. As we are aware in the arts, images can deceive without dishonest intent, simply through lack of quality. Images which pretend to be no more than fiction may be taken for mirrors of reality. Editing, or cropping, of images, innocently or otherwise, robs them of their integrity. And how many of us are aware of the artifice and manipulation that can contribute to the production of a pictorial advertisement, or to propaganda? Altogether we are inclined to expect too much of images, and to place too much trust in them.

2. When the production and availability of images is made possible by technology, both access to the means of production of images, and access to images themselves, are also limited by the availability of that technology.

The availability of images has been facilitated by technology, but suddenly both the production of images and the ability to view them has become dependent, in some cases, on the availability of costly technological hardware. Access to images in many formats, including all moving images, is limited to those who can purchase or obtain access to expensive equipment in addition to the software which itself may not be cheap. For many people, in many parts of the world, books, journals, and other 'conventional' print formats remain the only available source of visual as well as verbal information. At the same time we should notice how technology-based communication tends to be an overwhelmingly one-way process of which the great majority of us, throughout the world, are no more than passive receivers. Access to the means of production and transmission is simply not available to us.

In the relatively affluent Western countries we have become accustomed to being surrounded by and bombarded with images. If they sometimes irritate us, in general it would appear that we want more and more. Even in 1928, Arthur Mee introduced I See All with scarcely concealed disapproval:

> We are all in a hurry today; we have all bowed the knee to pictures. We cannot wait. We must see the thing at once... We have lived into an impatient world; some have been born into it and do not know what patience is. All of us want to see things, and to see them quickly.

We have become greedy for images, and our greed has produced a glut, a

surfeit, an excess of images. Nowadays no home is complete without its formidable array of hardware so that, at any hour of day or night, we can choose between watching a video or any one of many television programmes provided by orthodox or cable television. We have been lured by the Pied Piper of the media to prefer an unreal world of images to the challenge and responsibilities of the real world. At the same time, we have not been adequately trained to cope with the images we are exposed to; we cannot always decode them; we have little notion of resisting them; helpless victims of other peoples' images, we are persuaded that we need not, and cannot, make images of our own.

Experts dispute whether scenes of violence on television harm our children, or whether the imagery of pornography degrades women (and men), but if we are wise we know the power of images and the weakness of our defences. We may laugh urbanely at the wit or naivety of advertisements, confident of our invulnerability, and yet McLuhan has warned us that even 'highly literate' people 'cannot cope with the nonverbal art of the pictorial... They have not the art to argue with pictures'[3]. And, he says,

> Education is ideally civil defense against media fall-out. Yet Western man has had, so far, no education or equipment for meeting any of the new media on their own terms. Literate man is not only numb and vague in the presence of film or photo, but he intensifies his ineptness by a defensive arrogance and condescension to 'pop kulch' and 'mass entertainment'[4].

Even the artist, whom one assumes to be highly visually aware, may expose himself to images at his peril. Art college librarians are familiar with the art students' appetite for images of all kinds, and it is entirely right that the young artist or designer should delight in the richness of the visible world and should learn to speak in many tongues so far as visual languages are concerned. And yet without self-discipline, continued exposure to image 'fall-out' can sometimes result in an artistically debilitating radiation sickness, for artistic strength and integrity invariably derive from concentration and limitation, from working in one's own language, within one's own tradition, and, not least, from an ability to realise how much richness there is in the most simple object seen aright. As Goethe pointed out,

'Sticking to the same subjects, to his cupboard of old household utensils and marvellous rags, is what made Rembrandt unique' [5]. Almost as if he could foresee the trappings and diversions of our own age, Goethe had previously declared 'For just as it is written that it is difficult for a rich man to enter the Kingdom of Heaven, so it is also difficult for a man who....enjoys the tinsel-magnificence of the modern world to become an artist of feeling'. Visual literacy for the artist can perhaps be defined,in Blake's words, as the ability 'to see a world in a grain of sand'. Ironically, the title I See All echoes a passage in which Emerson, inspired not by a profusion of images but by a particular moment in a particular place, described that not uncommon sensation of feeling suddenly and wonderfully happy and at home in a benign and meaningful universe: 'I am nothing; I see all; the currents of the Universal Being circulate through me; I am part or parcel of God'.

Let me tell you a true story. The librarian of an art college in southern England was one day asked by an art student for pictures of cumulus clouds. Instead of showing the student pictures in a book or in the library's picture file, the librarian pointed to the window, through which magnificent cumulus clouds could be seen drifting across the sky. 'But they're moving!', protested the student in dismay.

Of course, that student may have had a legitimate reason for wanting a photograph of reality in place of reality itself. But the incident is suggestive, to me, of the extent to which we have recoiled from reality in the century or so since Constable. Now we are greedy for images, but greed is not need. Who really needs images? What images do we need?

In art history, the need for 'universal availability of images' [6], that is, of images of works of art which are scattered throughout the world, for purposes of study and teaching, is self-evident, and seems more and more nearly an attainable goal [7]. In other subjects, too, images have vital tasks to perform. But is there a general human need for images, or are there specialised needs for visual information apart from the needs of academics? One short answer to this large question is provided by the ancient Chinese saying, 'One showing is worth a thousand tellings'. Images show us things we need to see; they make

things clear; they make things vivid and - in spite of their limitations - real. A diagram might help an isolated farmer in India to assemble a water-pump. Pictures of the devastation of Hiroshima and of the suffering of its people brought home to the scientists responsible for the atomic bomb the implications of what they had made. Photographs of the victims of the concentration camps are probably fixed in all our minds, reminding us of what must never be forgotten. Images may be able to change us for the better; why should they not improve as well as deprave? They can alter the ways in which we conduct ourselves, if not always as profoundly as one might wish. Thus McLuhan tells how awareness of 'conspicuous consumption' was fostered by press photographers

> who began to invade the entertainment spots of the very rich. The sights of men ordering drinks from horseback at the bars of clubs quickly caused a public revulsion that drove the rich into the ways of timid mediocrity and obscurity in America, which they have never abandoned. [8]

Today half the world needs to be shown the plight of the other half, and the other half needs their plight to be shown: we should not forget that often the need for images is a need to make images (or a need for images to be made), rather than a need to see them. Images are information; they cannot be excluded from all our needs of information. But let us remember, too, that while images can show us truths which are hard to bear, and can supply us with information which we ought but would rather not know of, they can also bear witness to, and embody in themselves, some of our finest achievements; they can delight and inspire us. In the arts we are very much aware of this, and we are, or should be, aware that art is the property of all humankind, not just of specialists.

Let me try to draw out some conclusions.

1. Images and need

Universal Availability of Publications (UAP), including audio-visual materials, has been pursued by IFLA, with support from UNESCO, since it was first identified as an objective in 1973. But of course the concept of UAP does not mean anything so naive or impossible to attain as the provision of a copy of every publication in the world in every library in every community in the world! What it does mean is

the fulfillment of Ranganathan's ideal of 'Every reader his book':

> The objective of UAP...is the widest possible availability of publications to intending users, wherever and whenever they need it, as an essential element in economic, social, educational and personal development. [9]

Similarly, 'Universal Availability of Images' need not mean anything so futuristic (or impossible to attain) as access, from anywhere in the world, to a 'comprehensive' store of images any of which can be displayed on a visual display unit. What it should mean is that anybody, anywhere, should be able to obtain access to the images they need. Very often, need of visual information can be satisfied by means of conventional publications combining visual information with texts. This does not necessarily mean that in certain areas, such as art history, solutions to visual information problems, involving the use of information technology, should not be developed. But need should be distinguished from greed, and should be assessed in the light of the continued absence from our world of the universal availability of food, health, sanitation, housing, education, justice, and peace. At the same time, the pursuit of UAP and of the universal availability of images should both be accompanied by awareness of the need for the means of production and transmission to be available also.

2. Visual literacy

Just as the pursuit of UAP implies concern that literacy, also, should be widespread and universal, soo too provision of images should go hand-in-hand with training in visual literacy. There is of course a crucial difference between illiteracy and visual illiteracy. People who cannot read know that they cannot read. We all think we can 'read' images - but very probably, we cannot. Visual illiteracy is so widespread, so often unrecognised, and is so grave a disability in our 'Picture Age', that it should be tackled urgently throughout the world, by UNESCO and by those responsible for education everywhere who should incorporate it into curricula alongside literacy and numeracy.

Visual literacy includes: the ability to decode and interpret images; the ability to distinguish between truth, fiction, and deceit in visual communications; the strength to resist and to

reject dehumanising images; the capacity to avoid becoming insensitised or hardened to images of human suffering which ought to move us to compassion. And, just as literacy includes reading and writing, visual literacy should include the skills which we need to create our own images, to express ourselves visually.

Specialists in visual communications have developed their own jargon, a code which for most of us needs to be decoded. Whether this degree of incomprehensibility is strictly necessary, I cannot judge; what I am sure of is that the first essentials of visual literacy can be fostered without mystification. Artists, art educators, and even (as we shall see) art librarians, may have a great deal to contribute, and artists not least should welcome any opportunity of stepping back across the gulf which has opened between 'art' and 'the public', to perform a public service, and to go into the community not so much to teach 'Art' as to help people to see and to communicate visually.

3. Libraries

Libraries are ideally suited for making images available for several reasons:

1) Libraries already contain very many images, usually accompanied by text, in books and other conventional print formats. Every library is an image library.

2) When costly equipment is essential, libraries can make it available communally and in a way which is both just and economic. For the same reason, libraries should also consider providing access to means of production and to networks of distribution. Where there is a need to be met, libraries should set up and equip reprographic facilities, community photography workshops, and so forth, and should publish, publicise, display, and distribute verbal and visual statements and information originating with individuals, minority groups, or whole communities, which would otherwise be unspoken, unheard, unseen.

3) Picture files and image banks located in libraries can easily be used in conjunction with books and other sources of information which can help in the understanding and decoding and appreciation of the image. Libraries surround images with the means to make sense

of them. They can sometimes help us to restore images to their contexts, if only in our imaginations. Libraries are laboratories equipped for the analysis of images. Libraries are 'language laboratories' where individuals can learn to read the language of images.

In Denmark, a number of art librarians working in public libraries have formed an association known as Kunstfaggruppen. Nowhere have I come across a more committed and radical interpretation in practice of what art librarianship can mean, or a more heightened awareness of what I once called 'art library power' [10]. These Danish art librarians are profoundly concerned with the gulf between art and most people, a gulf which they believe is at least partly the result of a lack of visual education. 'Children learn to read and write, but to acquire pictures has long been a neglected domain'. Matters are made worse by the proliferation of images in modern life:

> Everyday we are bombarded with pictures: in advertisements, T.V., comics, streets. Our abilities to read visual news are deadened, and we are easier a prey to the effects of mass culture. The visual aspect must be strengthened, and the visual idea made more familiar. Here we think that the libraries have a great task... [11]

There is, of course, a limit to what libraries can do alone and unaided; nor can the challenge of visual illiteracy be adequately met simply by combatting 'bad' images with 'good' ones. But we can and must make 'good' images available; we can, like our Danish colleagues, take them to people by means of exhibitions, picture loan schemes, and the like; we can provide books which can help people to decode images, and we can, through bodies such as IFLA, attempt to persuade UNESCO, for instance, to tackle visual illiteracy as a major priority, and we can offer the use of our libraries to support this task worldwide. Whatever we can or cannot do, it behoves us, who are involved with images, and with mankind, to take to heart Walter Benjamin's warning that the illiterates of the future will be, not those who cannot read, but those who cannot read images.

References

1. I See All: the World's First Picture Encyclopaedia, edited by Arthur Mee. London: Amalgamated Press, 1928-1930. Five volumes.
2. For further information see:
   Coulson, Anthony J. 'Illustrations'. Chapter 24 of Art Library Manual, edited by Philip Pacey. London; New York: Bowker, 1977 pp.372-388.
   Evans, Hilary and Mary. The Picture Researchers' Handbook. Newton Abbot (U.K.): David & Charles, 1975.
   Harrison, Helen ed. Picture librarianship. London: Library Association, 1981
3. McLuhan, Marshall. Understanding Media: the Extensions of Man. London: Sphere Books, 1967 p.246.
4. Ibid., p.208
5. Goethe. 'Commentary on Falconet'. In Goethe on Art, edited by John Gage. London: Scolar Press, 1980.
6. The phrase 'Universal availability of images' was coined, to the best of my knowledge, by Wolfgang Freitag during a meeting of the IFLA Section of Art Libraries at Montreal in August, 1982. I am grateful to Wolfgang Freitag for inspiring the line of thought which led to the writing of this paper.
7. Sandström, Sven. 'Towards a universal program for the documentation of art'. Visual Resources vol.II, no. 1/2/3 (1981-82), pp.63-67.
8. McLuhan, op. cit., p.214
9. Vickers, Stephen. 'The Fundamental of UAP'. IFLA Journal, 8 (1982) no.1, pp. 42-49
10. Pacey, Philip. 'Art Library Power'. Assistant Librarian vol.68, no.6 (June, 1975) pp.96-100
11. Behrndt, Helle. 'The Use and Development of Art Library Materials in Large and Small Libraries'. Art Libraries Journal vol.6 no. 3 (Winter, 1981) pp. 7-12.

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On-Line Databases in the Fine Arts

by

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In the application of information technology to a specific discipline it is a commonplace that the physical, natural and social sciences have taken the lead. The major bibliographic services are those in medicine, chemistry, engineering, public affairs, education and business. In an information world which now consists of about 2500 abstracting and indexing services, perhaps 500 of which are on-line, including such giants as Chemical Abstracts, it seems insignificant to speak of a discipline which can boast only four or five on-line databases, the largest of which has little more than 100,000 records.

There are reasons, however, why the field of art may be of special interest in the world of information technology apart from our own particular interest in the subject. The tremendous volume of information which can be expeditiously handled or managed with the aid of computer technology clearly responds to the broad interdisciplinary direction in which art history is moving. The problems of commanding information in a discipline which is constantly redefining itself in ever broader and looser terms can thus be partly solved by this technology. The characteristic mix of bibliographic and non-bibliographic data, the analysis of objects and images, as well as literature, also makes art history a field of particular interest in information technology. And the special problems of searching the complex intersection of material, conceptual, chronological, and geographic data, not to speak of such indefinite values as style designations, present a particular challenge.

The production and distribution of computerized data in the humanities generally is in a state of flux.[1] In art history several major bibliographic services produced with the assistance of computers are still available only in print but are currently engaged in the transition to on-line distribution. These include the Art Index, the Arts and Humanities Citation Index, and RILA.

Others, including some important non-bibliographic databases, are accessible on-line, but only for local or otherwise limited use. The J. Paul Getty Trust is engaged in an ambitious project to develop an integrated software system for the whole range of art documentation. In the face of so much change I will focus my comments on those databases, all bibliographic, which are currently on-line for general access.

What then are the art databases which are available on-line today? Where, and in what environments, are they available? Who is using them, what for, and with what results?

The largest and most comprehensive, though not the most widely distributed, of these is the Répertoire d'Art et d'Archéologie (RAA). I need not describe the scope and character of the RAA to this audience. As of 1982 the RAA had 120,000 records (reaching back ten years to 1972 when production of the RAA was computerized), available on-line through EURONET as part of the Centre de Documentation des Sciences Humaines database FRANCIS/H. The RAA adds about 13,000 to 14,000 records to the file annually.

Information distributed by Questel, the European utility which distributes FRANCIS, indicates that the RAA is 65% articles and 35% monographs; nearly 70 % of the citations contain annotations; 31 % of the material is French, 39% English and 30% in other languages. The less well-known Bulletin signalétique: art et archéologie, which covers ancient Near and Far Eastern Art, pre-Columbian American and Oceanic art (the areas not covered by the RAA) is also part of the FRANCIS/H database. It had 19,000 records as of 1982, and adds about 2300 annually. The Bulletin is predominantly periodical material (94%). Though distributed throughout Western Europe, these databases are not as far as I know available on-line in America.

Narrower in scope, but more widely available, is Art Bibliographies

Modern. This index to the literature of 19th and 20th century art currently has 68,000 records dating from 1974. It is on-line via DIALOG, Lockheed's American-based but internationally distributed commercial utility. Approximately 8000 records are added to this file annually. BRS, another American commercial utility which, though smaller, is also a worldwide distributor has recently added the Journal of the Society of Architectural Historians to its files. This file includes citations, abstracts and indexes to the whole journal from its first volume in 1941. Though small, it is the only available file with retrospective data reaching more than ten years back.

Lastly, there are the so-called special databases available in America (but only in America) through the network of the Research Libraries Group (RLG). RLG is an association of American academic and research libraries, which also includes most of the major American museum libraries in its Art and Architecture Program. RLG's primary function is to support the cataloguing and reference functions of these libraries. Its cataloguing network RLIN (the Research Libraries Information Network) reflects the comprehensive holdings of its member institutions in all subjects. In principle the cataloguing of all these institutions since 1979 is available on-line, not only to the members, but to others as well via search accounts. The main database can, of course, and does, serve as a reference tool for monographic data.[2] The art holdings of RLG have not been estimated, but collectively they consist of the combined acquisitions and cataloguing of the largest network of specialized art libraries anywhere in the world today; among them at least one, the Getty Museum Library, which is currently engaged in massive retrospective buying which will greatly enrich the retrospective data available on RLIN. Recently the authority files of the Library of Congress and the New York Public Library have also become available on RLIN.

Among the so-called special databases on RLIN I mentioned above, the most important is the Avery Index to Architectural Periodicals. This index began in 1934 as an in-house analytic card file to the periodical holdings of the Avery library. The whole index was published by G. K. Hall, with several supplements, from 1963 to 1979; and in 1979 it went into computerized production on RLIN. Nearly 500 periodicals in the fields of architecture and design (about half of them contemporary architecture journals) are regularly analyzed by the Avery Index, which currently holds about 7000 records. The second art database available on RLIN is SCIPIO, the joint auction sales catalogue records of the Art Institute of Chicago, the Metropolitan Museum, and the Cleveland Museum of Art. This shared cataloguing project now holds about 6500 current records which can be searched by auction house, date of sale, collector and title word. Both these databases have replaced card catalogues previously maintained in these libraries, and the data is now available only on-line. An update of the Avery index will again be published but for the time being no print record, published or unpublished, is available of either of these files.

Certain problems will be apparent from this brief recitation of available on-line databases: the files are small, they do not include much retrospective literature (a matter of small concern to scientists, but great concern to us); they are unevenly distributed, some available only in America, others only in Europe. Other problems arise from the diversity of the databases and the different strategies required to search them. The searching characteristics are determined partly by the producers of the databases and partly by the distributors. It is difficult to obtain valid feedback and analysis based on the real-life use of these databases for a variety of reasons. The first is that they are hardly used at all. Use levels are not yet sufficient to lend themselves to analysis. The second is that the distributors do not provide any analysis or feedback to the producers. The producers as a rule have no information about the on-line use of their data; and the distributor has no

detailed information about the editorial criteria and policies that determine the production of their databases. This is a serious problem, which has to be solved before significant progress can be made. A good deal of attention is being paid to the factors affecting on-line research and the means of analyzing them; but the main problem is that the distributor offers no real pipeline from the user back to the producer which would enable the producer to adjust policies in response to verified needs.[3]

With the proviso, then, that use levels are still low and reliable information is not widely available, what can we say about the real-life use of on-line art data right now? What is the environment in which on-line searching of art databases is conducted?

On-line search facilities exist in many large academic and even public libraries in America today and I believe in Europe too. My examples are drawn from the universities of London and Munich, Columbia University in New York, and the State University of New York (SUNY) at Purchase. The situation in London is, I believe, typical of the larger institutions. On-line services are managed by a central office (called Central Information Services, or CIS, at London). The scientific databases are used sufficiently heavily to warrant maintaining terminals in various specialized research libraries of the university. In the other disciplines the prospective user must go to CIS, where the services he needs and a helpful staff await him. This is the case for art history. The Courtauld and Warburg Institutes and the other departments of the university where art history is taught, University and Birckbeck Colleges, do not maintain terminals. The staff and students there do not make use of the services because on the whole they are unaware of them. CIS does not advertise or promote on-line services to the humanities community in the university, for the very good reason that the resources offered by the databases themselves

are still too limited to warrant it. Things appear to be at an impasse which will only be broken by the producers: that is, by making more data available.

A similar situation exists at Columbia, where the only on-line service offered at the Avery, the University's art library, is the Avery index itself. All other on-line services are available at Butler, the central university library, but the reference librarian there handles no more than ten or twelve art searches a year. The Avery index is principally searched by Columbia architecture students. The typical request is for a contemporary architect or his work, and primarily for plans, elevations or illustrations. This suggests that at present it is the immediate practical need for inaccessible up-to-date professional information, not the slow long-term researches and ruminative speculations of the historian, which prompts the appeal to an on-line system. Avery and Butler chiefly serve the Columbia community, but outsiders (mostly in New York) are also served to some extent. The outside user might be an architect, a publisher, or a public policy consultant. The nature of this outside use reinforces the impression that the typical user is under a certain amount of pressure for time, needs information which is current and therefore difficult of access, and is willing or obliged to consign his problem to someone else. This does not seem to describe the typical art historian.

The only exception I know to this limited use is at SUNY/Purchase, a new public university campus with a relatively small, predominantly undergraduate population of 3,000 students in a fairly isolated environment (bibliographically speaking), 50 miles from New York City. In the library of this institution it is the policy to encourage on-line searching among the students. Bibliographic instruction is incorporated into the teaching and training of students, and

the reference librarians play an active part in this process in cooperation with faculty. (It should perhaps be pointed out for the benefit of a European audience that the undergraduate students in an institution such as SUNY are generally not training for the art historical professions. Theirs is a pre-professional general liberal arts education.)

If these examples are representative, and in the absence of a more systematic study I cannot with certainty say they are, the implication is clear: the active, relatively new, relatively isolated institution with limited bibliographic resources fosters and exploits on-line searching, while the older more established and bibliographically better-endowed institutions do not. The institutions where the most advanced research is being done are not yet taking advantage of the most advanced means of doing it. In academic and research libraries this probably reflects the richer printed resources which the older libraries have at their disposal, and the established (not to say entrenched) habits of research and pedagogy of their faculties. At a meeting on information problems in art history at Oxford last year it was commented that "there is no correlation between the explosion of information and the problem of training students or the quality of work produced using that information".[4] I do not believe this is so, but it is a widely held view.

Other kinds of obstacles are characteristic of the museum libraries. Because they are parts of institutions whose primary function is the collection, preservation and display of art, not teaching and research per se, they have not had access to the mainstream of information technology in the library community to the extent that academic libraries have. This situation has begun to change in America, thanks largely to the museum membership of the Art and Architecture Program of RLG, but it is still true that the clientele of museum libraries, where so much advanced research is done, has little exposure to

on-line resources.

The crucial figure in the environments where on-line databases are searched is the intermediary, the person who actually does the searching. It is upon this person that both user and producer depend the most, and from whom they can best learn. The searcher must know the subject well enough to formulate a reasonable search strategy in consultation with the user; and must know the particular commands and pecularities of the sytems being searched. This can be quite complex, and in today's world at least, is quite beyond the resources or experience of the user. Scholars tend to be a secretive lot, and in the various studies of resistance to on-line searching that have been conducted, this necessary role of the intermediary is often perceived as an obstacle. It is certainly desirable that the user should be able to approach the terminal directly. There has been much discussion of "user-friendly" systems, and some effective experiments, but as long as the utilities and the databases themselves are so diverse, and the strategies for searching them so complex, it seems unlikely that we can manage without the trained intermediary.

One of the most perplexing problems of on-line searching, for example, is the so-called false drop, the irrelevant reference. A skilled intermediary can keep these to a minimum, but depending on the nature of the search one will inevitably get more or less irrelevant data. At RILA we recently conducted a search of Art Bibliographies Modern. We were looking for references to the influence of Raphael in the 19th and 20th centuries. The search could not safely be conducted using the word "influence", because we could not assume that the notion had been expressed in that way in the database. Nor could we search Raphael only as a descriptor (index term) since not all references to Raphael in the database were indexed. We had to do a free text search to pick up data in the titles and abstracts. In the end we searched the single word

"Raphael" (under a variety of spellings), and came up with 124 references of which 97 were irrelevant. From Max Raphael to Raphael Peale there were altogether 24 other Raphaels in the database who could not be distinguished from the Renaissance Raphael in the search strategy. Nine new and relevant references were found. And at least one item, on Raphael and Ingres, would have been missed had we searched in any other way.

On another occasion a more limited search of the RAA for references to the façade of the Louvre produced nine listings of which five were irrelevant. three were relevant and one was uncertain. The combination of the terms "Louvre" and "facade" inevitably yielded references to sculpture from other façades (Brouges, Chartres) and references to drawings of façades (e.g. by Polidoro da Caravaggio) now in the Musée du Louvre.

False drops can in some cases be reduced by a careful search strategy, but the more narrowly one defines the search, the greater the risk of excluding relevant data, too. The particular problems encountered in the examples given cannot be avoided by the intermediary or the distributor. They could however be avoided by the database producer if strict authority control of names were maintained; that is, if all names cited in the titles and abstracts were indexed and the index itself were subject to authority control. In that case we could have safely searched only the particular Raphael and the particular Louvre façade we wanted. Authority control of this kind is very expensive, labor-intensive and time-consuming for the database producer. It may not seem warranted in these particular examples. But as the databases grow in size and complexity (and we must remember that large cumulations of retrospective data will remain in active use in the humanities), it will become more and more significant.

What then are the stimuli to use on-line resources, what are the advantages,

actual or potential? What, finally, is the possible effect of on-line searching on the work habits of art historians and even on their work itself? The volume of data to be searched and the complexity of the questions asked are the two main justifications for on-line, as opposed to manual, or print, searching. It seems obvious that on-line searching can respond to the broader, interdisciplinary direction of art history today by facilitating more comprehensive bibliographic searches and linking them to other less familiar disciplines. We are just beginning to recognize and exploit the presence of art data on non-art databases.[5] The speed with which so large and diverse a body of information can be searched and accurately transcribed is a significant advantage. Not least and somewhat surprisingly, there are indications that cost considerations may ultimately favor on-line searching.[6] Whether the cost is borne by the user or the institution (and it is frequently a combination of the two), there may be real economies involved in terms of the user's and the librarian's time. This is already proving true in the sciences and we need studies in relation to the humanities.

About a year and a half ago an on-line experiment was conducted at the Courtauld Institute with a British Library grant, using the RILA database and inviting students and scholars to submit queries to the system. As one would expect, there was almost total unfamiliarity with such systems, and an initial scepticism mixed with curiosity. The records of the experiment reveal again and again a cautious approach and then a growing response to the stimulus of so wide-ranging, rapid and surprising a tool. An irresistable desire to have answers to questions one never thought of asking occasionally arose. Questions about one-armed bandits and Victorian park benches began to appear alongside the more conventional requests for information on portraits of Veronica Gambara, Welsh artists, the location of paintings by D. H. Lawrence,

English language books on Art Nouveau published between 1970 and 1978, or the activity of British artists in Rome in the 1840's. If the on-line database prompts whole new lines of investigation once its potential is more fully recognized and developed, it will not be the first time the mere capture and organization of information has had such an effect. For the database producer to anticipate and meet this need will require ever subtler and more detailed analysis of the literature, and it will have to be carried out with judgement and precision.

In conclusion, I would like to return to those non-bibliographic databases to which I referred earlier. Another way in which on-line databases may prove a most fruitful resource for the fine arts is in linking bibliographic and non-bibliographic data. Great progress has been made over the last century or so in organizing and classifying works of art. From Bartsch to Berenson the systematic ordering and documenting of art from a variety of perspectives has continued and yet much remains to be done. The original editions of Berenson's "lists" were short afterthoughts of a few pages appended to his essays on Italian painting. When Offner's corpus was announced in 1930 it was to be completed in three years, published in thirty volumes, and cover the whole of Florentine painting from its origins to the end of the 15th century, with full bibliography, critical analysis and illustrations. Advance subscriptions to the whole work could be had for $1100. Twelve volumes and fifty years later the work remains incomplete. Diverse aspects of the analysis and classification of early Italian painting were continued in the work of other scholars such as Garrison and Kaftal, and are now being pursued by their successors with the assistance of computer technology at the Scuola Normale in Pisa.

Archival work is being coordinated with object description and analysis, as the list of projects at Pisa shows. Such work is going on in many places, and if it is conducted in full mutual awareness and cooperation, then we may see great progress.

There is a danger, however, that this work will [redacted] remain [redacted], available on-line [redacted] only locally and not in print, unless means are found to disseminate it more widely. The intermediaries who are today searching the handful of art databases currently available already complain of the complexities involved in handling so many discrete searching systems. We will need to reconcile the systems in use, and make them compatible. The database producers will need to exchange data by automatic transmission and perhaps even to share the responsibilities for its collection. And we will need to draw together into an easily accessible form a widely scattered and potentially enormous body of records. Otherwise we run the danger of replacing the problem of the expensive out-of-print book with that of the inaccessible database.

Thank you.

NOTES

1. See Eileen M. Mackesy, "A Perspective on Secondary Access Services in the Humanities", JASIS, May 1982, pp.146-151.

2. See Julia E. Miller, "OCLC and RLIN as Reference Tools," Journal of Academic Librarianship, vol. 8, no. 5 (1982), pp.270-77.

3. For a recent discussion of these problems see Raya Fidel and Dagobert Soergel, "Factors Affecting Online Bibliographic Retrieval: A Conceptual Framework for Research", JASIS, vol. 34, no. 3, (1983) pp.163-180.

4. Art Libraries Journal, vol. 7, no.2 (1982), p.31.

5. See the useful survey and analysis by Ilene R. Schechter, "Art Database Searching", Art Documentation, Summer, 1982, pp.94-95. The only detailed case study of the use of art data on non-art databases I know of is Darlene Brady and William Serban Ruston, "Searching the Visual Arts: An Analysis of Online Information Access", Online, October 1981, pp.12-32.

6. cf. Saul Herner, "Abstracting and Indexing Services: The Business and Science," Miles Conrad Memorial Lecture, NFAIS, Arlington, Va., March 2-3, 1982.

IFLA 1983

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DIVISION: SPECIAL LIBRARIES
SECTION: ART LIBRARIES

58-ART-3-E

State of Automation in Swiss Art Libraries

A. The General Situation

by

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STATE OF AUTOMATION IN SWISS ART LIBRARIES

The General Situation.

Switzerland has more than 800 archives, libraries and documentation centres (1). However, only a few of them are completely or partially automated. The public libraries of large Swiss enterprises are the most advanced in automation. These mostly planned and implemented automation during the boom years, that is before 1974/5, at a time when the means for innovation, even in this peripheral field, were more plentiful. In addition the economic advantages of automation were greater than the costs involved, so that it was economically sound to invest in this area.

However, many projects for automation of public libraries or archives only started to be discussed at a time when, after years of affluence, governments started to freeze expenditure. Consequently projects remained projects. To put it drastically, Switzerland became a developing country in this respect. In isolated cases automation was undertaken, but this occurred by chance or on the initiative of single institutions rather than through any systematic policy. This led to a chaotic situation. The confederate authorities reacted as usual with the setting up of a commission. This commission was instructed to suggest a national policy for scientific and technical information and documentation. It presented its final report in 1982 (2). The report points to the many defects and generally recommends a more active implementation of automation for Swiss information services. It particularly recommended the formation of areas of subject specialisation, cooperative cataloguing, and as a precondition ~~for a union catalogue~~, the establishment of a national exchange format. The commission also directed positive recommendations to the Swiss Landesbibliothek to initiate studies for the automation of the Swiss Union catalogue. This project is urgent since the catalogue is a manual one and the Landesbibliothek cannot therefore make use of the magnetic tapes of the larger Swiss libraries nor of the foreign data services.

More or less the opposite is true in the case of Das Schweizer Buch, published by the Swiss Landesbibliothek and basis of the Swiss National Bibliography which lists works published in Switzerland, or works published abroad by Swiss authors or dealing with Switzerland. This bibliographical data is produced manually and cannot, therefore, be used by automated libraries.

The case of the Landesbibliothek shows how little progress has been made in library automation nationally, but it also shows how little impulse there has been for a coordinated and properly implemented policy of automation in those institutions where the confederate authorities have a direct influence.

Automation in art libraries.

There are approximately 20 specialised art libraries in Switzerland, if the special departments of large general libraries are included. There is nothing to report on automation in the independant, specialised art libraries, since no project has yet been

realised. Some large libraries with substantial art departments, however, have already entered the age of automation. The state of automation of three of the most important libraries will be outlined hereafter. We will be dealing with the University and Cantonal Library, Lausanne; the Library of the ETH (Eidgenossische Technische Hochschule) in Zürich and the Zentralbibliothek, Zürich. These three libraries not only reflect three different levels of automation, but also the lack of coordination among Swiss libraries as they move toward automation. Although there has long been talk of coordination, each of these libraries has developed and introduced its own system independently of the other.

The Cantonal and University Library, Lausanne and the system SIBIL.

This library is important, not because of its holdings in art literature, but for the system SIBIL (Système intégré pour les bibliothèques universitaires de Lausanne) that it developed and which has already been taken on by the Handelshochschule, St. Gallen and the technical university in Paris, and which is planned for other university libraries such as those of Bern, Basel, Freiburg and Geneva.

SIBIL is relatively generous in its conception, largely because automation of the library was introduced at the same time as the university moved into new buildings in Dorigny - which made the financing of automation very much easier.

SIBIL was developed to coordinate the administration of acquisitions and ~~lending~~ circulation in two libraries on different sites (University Library, Dorigny and the Cantonal Library, Lausanne), as well as to centralise the cataloguing of various libraries in the Lausanne area. The aim was to catalogue the holdings of the various libraries centrally but to decentralise themrfor the users. The Lausanne system could berve as a model for the organisation and automation of Swiss libraries.

SIBIL runs on the computer at the computer centre of Canton Waadt to which it is linked by vdu terminals. A minicomputer is used for inputting catalogue entries. SIBIL was introduced by stages from 1971 and consists of three subsystems: Acquisitions, cataloguing and circulation.

Acquisition:

The acquisition subsystem makes it possible to automate the administration of ~~reservations~~ orders, reminders, receipt of books, notification of readers and control of cataloguing. All up-dates are on-line. The data for 25% of the orders come from the magnetic tapes of the Bibliothèque Nationale in Paris.

Cataloguing:

Cataloguing is done according to the VSB (Verband Schweizerischer Bibliothekare) rules, ~~Codification is according to MARC for all data.~~ and all data is in MARC format. The card index is brought up-to-date on-line by a minicomputer. Searches can also be made on-line (by the library staff) by ~~accession~~ call number or six different ~~tags~~ keys:

- by title, sub-title, original title
- by ~~class~~ press mark (key = press mark)
- by decimal classification (~~tag~~ key = DK)
- by ISBN (~~tag~~ key = ISBN)
- by ISSN (~~tag~~ key = ISSN)

- by series (key = number of series and volume)

Circulation:

This subsystem makes possible the decentralised administration of stock in the stacks or in the reference library. Altogether some 200 batch programmes make possible the generation of numerous lists for internal and external use. The next stage of importance in automation is the introduction of an on-line search facility for the public.

UNIDOC: Recherches Documentaires Informatisées:

At the end of 1982, the information service UNIDOC was linked to the library. Several dozen databanks can be used per terminal. Searches can be made by author or precise subject areas as well as more vaguely defined subject areas. A search costs between 90. - 200 Swiss francs.

The Library of the ETH in Zürich.

The library of the ETH is important to art historians particularly for its comprehensive holdings on architecture and architectural history. It has been computerised since 1975 (4). At presents there are four systems in use: ELAS for circulation, PEKOS for the control of serials, MIKAS for cataloguing and EDIS for subject searches. All programmes were designed by the development department of the library. It took the equivalent of 50 working years to realise the automation of the library.

The circulation programme ELAS:

ELAS (Elektronisches Ausleihkontroll-System) includes the various functions of circulation, which amount to about 25: e.g ordering, control, return, reservation, registration of payment of fines, users. The user may order books for himself by using the terminals. The system controls entitlement of use, where necessary asks for additional information, indicates whether the book is available and if not, accepts reservations. There are some additional batch programmes, about 50 in number to control such matters as the loan period and the printing of reminders.

Serial control PEKOS:

PEKOS (Periodika-Kontroll-System) includes the incoming issues of current periodicals and the payments. The originality of this system lies in the identification of titles by abbreviation: titles of one word are identified by the first six letters, titles of two words by the first three letters, titles of three words by the first two letters and titles of four or more words by the first letter of each word.

Cataloguing programme MIKAS:

MIKAS (Mikrofiche-Katalog-System). Since 1976 the catalogues are machine-readable and stored in the computer. Cataloguing entries are made in a free format with a variable number of data fields of variable length. Fields are identified by numbered tags and there are about 70 different tags. Catalogues are published on microfiche (COM). Searches in author and subject catalogues are made as in the original card catalogues. Recataloguing of holdings pre-1976 has so far not been possible. In

order to incorporate them into the new system in some way, the old card catalogues have simply been microfiched.

Subject search facility EDIS:

EDIS (Elektronisches Dokumentations- und Informationssystem) was developed to supplement and expand MIKAS. Through EDIS subject searches are made possible using Decimal classification. A subject search can be typed in and modified in a dialogue with the computer by searching the area around a decimal number (hierarchy, additional figures, cross-references etc). Titles found can be displayed on the vdu or printed out on the fast printer. EDIS uses the MIKAS data base, so that only the titles catalogued since 1976 are findable.

The new system ETHICS:

ETHICS (ETH Library Information Control System)
is at present being introduced. From 1985 it will run on the new computer system belonging to the library itself. It will replace the system which has so far been running on the computers of the computer centre of the ETH. Eventually it will be an on-line search facility for the library users.

Zentralbibliothek Zürich.

The basic subject areas of the Zentralbibliothek correspond to the subjects taught at the University, of these, the history of art is very well organised.
Since 1972 the library has been introducing computerisation for book processing. So far the systems for acquisitions and the cataloguing of periodicals have been completed. Data for acquisitions was partly taken from the magnetic tape service of the Deutsche Bibliothek, and will be used later for the computerisation of the catalogue. This last stage of automation is, however, not yet imminent - at the present time the circulation system is being automated. However, the format has already been worked out and established. It is a LC-MARC format adapted to Swiss needs, the so-called LC-MARC/VSB, which the Zentralbibliothek has developed for the VSB (Verband Schweizer Bibliothekare). LC-MARC/VSB is compatible with UNIMARC and will probably also be used as the exchange format between the library of the ETH and the Zentralbibliothek.

Consequences for independent art libraries

The outline description of these three libraries shows clearly that all appeals and recommendations for coordination bore no fruit. It is particularly irritating that there has not even been agreement on a unified format, so that there are now (admittedly soluble) problems for those independent art libraries that wish to automate. They certainly cannot develop their own systems and have to decide which of the others to adopt, without any certainty that other art libraries will choose the same. This gives rise to the fear that not even in the small field of art librarianship will there be a unified solution. However, it is not yet too late to agree on a coordinated plan of action.

Further questions arise: what do the libraries mentioned above achieve? what do they fail to achieve? what should be the aims of an art library? In other words, what does the user expect from an automated special library? Certainly he would expect to find the information he requires for his daily work quickly in the holdings of his library. For what use are the most detailed bibliographical listings from international data banks, if the relevant documents and books are scarcely available, or only appear too late, or turn out to be useless? An automated special library should, therefore, be more detailed in cataloguing is holdings than other libraries, so that the available information can be used optimally. This should present no problems and can be made possible through decimal classification, subject thesauri, keywords, subject headings and the inclusion of abstracts. However, it does presuppose that the cataloguing is done by experienced and specialised staff, by documentalists trained in art history, who know how to search the documents for additional information beyond the most obvious.

A computerised special library should also be able to catalogue new publications and periodicals on a more or less daily basis, so that they are instantly available. It is just in this area that a special library can differ from a large general library which often takes a long time to make new publications accessible. It does, however, mean that a special library must do all its own cataloguing of new publications and serials since it cannot take the basic data from magnetic tapes - this destroys a possible financial saving through automation. It would therefore be desirable that all Swiss art libraries should come to an agreement whereby each should take one particular subject area and be responsible for the cataloguing of new publications and periodicals as quickly as possible and make them available in exchange format to the other art libraries. Unfortunately the prospects of achieving this in Switzerland are not good. Not only do past experiences speak against it, but also the pronounced federalism, the local patriotism, the institutional egoism, as well as the real difficulties of a polyglot country.

NOTES

(1) Cf. Archive, Bibliotheken und Dokumentationsstellen in der Schweiz, 4 ed. of Führer durch die schweizerische Dokumentation, Bern 1976. The guide mentions only 668 documentation centres. Since then, however, many new centres have come into existence, so that the figure of 800 is probably more realistic. The very fact that this guide has not been republished since 1976 shows how little development there is in the professional librarianship or information science in Switzerland.

(2) Rapport final de la commission fédérale pour la coordination dans le domaine de la documentation scientifique. Bern, 1982

(3) Gavin, Pierre and Villard, Hubert. SIBIL-System, Bibliothèque cantonale et universitaire de Lausanne: Stand der derzeitigen Anwendung Ende 1979. In

"Nachrichten VSB/SVD." vol. 56, 1980, p.20ff; SIBIL, Système intégré pour les bibliothèques universitaires de Lausanne. 9 années d'automatisation à la Bibliothèque cantonale et universitaire. (Report edited by Pierre Gavin in collaboration with Paul Agopian). Lausanne, 1980.

(4) Möthiger, Ruedi. EDV-Einsatz in der ETH-Bibliothek Zürich. In "Nachrichten VSB/SVD," vol. 56, 1980, p.7ff.
idem, Übersicht über die EDV-Systeme, ETH-Bibliothek, 27.5.1982 (Internal MS).

(5) Höfliger, Paul. Die Automatisierung der Zentralbibliothek Zürich. In "Nachrichten VSB/SVD," vol. 56, 1980, p.15ff.

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IFLA GENERAL CONFERENCE MUNICH 1983

Division: SPECIAL LIBRARIES

Section: ART LIBRARIES

59-ART-4-E

Computerisation in Swiss art libraries: state of the art

B. Lausanne and Geneva

by

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English version by Morag Morton

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1. Lausanne: La Bibliotheque Cantonale et Universitaire and SIBIL

In 1967, the Department of State Education and Culture in the canton of Vaud decided to transfer the University from the town of Lausanne and to establish it in the country at Dorigny.

This 'uprooting' involved a restructuring of the Bibliotheque Cantonale et Universitaire (BCU), with the aim of organising the numerous smaller libraries, which are grouped around the central library, into a single coherent system. This new organisation entailed the following:

- the management of material which is physically separated but is now controlled by a single catalogue
- the Bibliotheque Cantonale remains in Lausanne
- the Bibliotheque Universitaire is transferred to Dorigny
- the placing of 250,000 volumes on open access

Only computerisation could successfully cope with the considerable tasks which this involved:

- multiple access to a single catalogue
- central control of loan services
- reclassification of open access stock according to UDC
- recataloguing according to ISBD

The Director of the BCU, M. Jean-Pierre Clavel, found a format in Grenoble adapted to the French language and derived from American MARC. Named MONOCLE, it was being worked on by M. Marc Chaveinc, then librarian at the Bibliotheque Universitaire. From 1971, the task of computerisation began at the BCU, culminating in the creation of SIBIL (Integrated System for the University Libraries in Lausanne) which is applied to the three key sections of the library:

- Acquisitions
- Cataloguing
- Lending

The system was installed step by step, and developed in such a way that it was as integrated as possible and compatible with the INTERMARC format.

2. Geneva: the university and scholarly libraries

Faced with the administrative problems of its many libraries, Geneva University decided to link up with SIBIL rather than creating its own system. An agreement was signed in November 1982, settling the terms and conditions of the contract and foreseeing, in particular, a growth in the number of libraries who might participate, especially among the scholarly libraries in Geneva:

- the Public and University Library
- the Art and Archaeology Library (an annexe of the Museum of Art and History)
- the Conservatory and Botanical Garden Library
- the Museum of Natural History Library
- the Museum of Ethnography Library

Thus from 1984, these five libraries will embark upon automisation on the same lines as the university libraries. We find within REBUS (the network of libraries using SIBIL) that the grouping of the Vaud canton and Geneva libraries offers exciting possibilities, since it has been decided to construct a common bibliographic data base. This solution, apart from its financial advantages, allows bibliographic information from a large number of the libraries in this western region of Switzerland to be collected in a single comuperised data bank.

This operation involves close collaboration and the adoption of common methods of work. It is quite impossible to consider computerising all the state and academic libraries and those in Geneva at a stroke. A ten year plan for the University and a five year plan for the city will allow the project, which will provide almost 200 terminals in its final phase, to reach a successful conclusion.

We must stress immediately what the differences are between Lausanne's method of operation and that of Geneva, as far as the three sections are concerned, that is, acquisitions, cataloguing and lending: in Geneva only cataloguing will be computerised at first. This operation will bring an end to the printing by each library of its own catalogue cards (computer production of these will still be possible) and the interfiling of these cards in different catalogues which will no longer be used. These traditional librarian and user tools will be replaced by:

1) a catalogue on COM microfiche, in several copies, at the disposal of library staff and users;
2) on-line access via display screens, initially for library staff (principally cataloguers);
3) lists of new accessions.

3. The Lausanne/Geneva network

Now let us examine the effect of introducing computers in our own particular field: art libraries, with special reference to the Art and Archaeology Library in Geneva.

1) First of all, the idea of shared cataloguing in the different libraries. This would cut out almost 30% of cataloguing by eliminating duplication of effort and of catalogue records.

2) Next, the creation of a join computerized catalogue for the university and academic libraries in Lausanne and Geneva will gradually place all, or at least a large part of their collections (some 300,000 titles already) at the disposal of librarians and users, thus improving access to titles and facilitating research. The Art and Archaeology Library, established at the same time as the Museum of Art and History in 1910 and then relocated between 1950 and 1952 in the building it still occupies on the Promenade du Pin, with its stock of some 100,000 volumes and 3,000 periodical titles, has remained for historical and financial reasons reliant in several subject areas on the other academic libraries whose collections are older, such as the Bibliotheque Publique et Universitaire with origins in the mid-16th century, or the very specialised collections of, for instance, the library of the Department of Anthropology in the Faculty of Sciences. Access to these collections will be facilitated. Thus, at the end of the next decade, we hope to be able to make available networks of computerized data bases and information banks, first on an inter-canton Lausanne/Geneva basis, then on a regional level, and even, with the REBUS group, on an international level. This will allow our libraries closer cooperation and a more efficient rationalisation of work loads, with a view to further improving the exploitation and interchange of the stock which they hold.

Notes

1. In Switzerland, public education is the responsibility of the Cantons, with the exception of the Ecoles Polytechniques in Lausanne and Zurich which are dependent on the Confederation.
2. For a complete study of SIBIL, see: SIBIL: Système intégré pour les Bibliothèques universitaires de Lausanne: 9 années d'automatisation a la Bibliothèque Cantonale et Universitaire, ed. Pierre Gavin... Lausanne: Bibliotheque Cantonale et Universitaire, 1980 (2e ed).

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Computer Applications to Slide Collections

by

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This paper addresses itself to several new and continuing automation projects in visual resource collections. Sheila Hannah and myself published a composite of information on such projects in 1980.[1] This paper looks at other attempts at automation, using both main-frame computers and microcomputers. Often schools which have decided to attempt such projects have chosen particular sections of their collections for pilot testing, usually those slides which are not easily catalogued logically or have such varying possibilities of classification that the multi-access indexes provided by automation seem a good solution. The intent of this paper is to make the audience familiar with a few of the many projects which are currently being undertaken in slide libraries: their scope, their goals, their reasons for implementation. Some are very conservative in approach; others very ambitious. In our original publication Ms. Hannah and I both felt that our research pointed to the fact that main-frame computers were the best answer for the automation of slide collections, and that microcomputers were a second best choice. Susan Babineau-Simenauer gave a presentation at the 1981 Mid America College Art Association conference describing her attempts to computerize her slide collection at the Institute of Fine Arts, New York University, using a microcomputer. Other slide librarians have been making similar attempts; so it will be noted that the projects discussed in this paper have made use of a variety of hardware. Ms. Babineau-Simenauer has been kind enough to be present at the I.F.L.A. to answer any questions addressed to this paper and to add information on her own project.

In 1981 in a presentation given at ARLIS/NA in San Francisco, M.Elizabeth Scott, curator of slides and photographs at John Hopkins University, described in detail the results which had been achieved by automating information on their collection of manuscript slides.[2] Depending upon the user's knowledge of manuscripts, the possible methods of desirable filing and organization of the slides were numerous: while an expert might wish to have slides filed by manuscript location and manuscript number, the more casual user might only wish to be able to locate stylistic examples, or even find iconographical images. Automation seemed the perfect way to allow users to locate what they wanted, using indexes which could be alphabetized

according to style, geographical location of library or museum in which the manuscript was located, language of the manuscript and its number, manuscript name, folio number, and subject of the folio. The University Computing Center took over the task of creating a program for the project. The attempt was successful and the generated indexes were frequently used. A typical printout for search by subject matter is illustrated below.

Subject	Location	Library	MS.Number	MS.Name	Folio	Style
Christ Healing Possessed	Mt.Athos	IWIRON	5	Gospels	156	Byz
Christ Healing Samaritan	London	B.M.	ADD.47608	Bible Holkham	24v	Goth
Christ Heals Paralytic	Mt.Athos	IWIRON	5	Gospels	377v	Byz

Finding the automated indexes for manuscripts to have been helpful, Ms. Scott noted that slides in other areas of the collection, such as classical sculpture, were also requested by various methods: style, date, iconographical representations, and there is the ever present problem if a Roman copy of a Greek original should be filed under the section of Greek or Roman sculpture. In fact, here at the University of New Mexico it even had been suggested by one faculty member that all Roman sculpture be divided into the reigns of the various emperors. There seems to be no end to the variety of ways in which faculty members see the most logical way of arranging slides. Ms. Scott worked out a system similar to that used with the manuscript slides for the classical sculpture slides. During the coming year, she hopes to implement more automated indexing of various parts of the collection.

At about the same time that John Hopkins University was providing an automated indexing system for its slide collection, Cornell University was beginning to search out similar possibilities for its own collection. Ingeborg Wald at Cornell University has made a great deal of progress in effectively using automation in her slide collection. The project which she first began in 1980/81 has been succinctly outlined in an article which gives detailed information both on her searches into choosing a classification system which would best fit the needs of the Cornell collection and to find or create a compatible automating system which would fulfill the desired goals.[3] The resulting slide cataloguing system is an amalgamation of the best features of the various classification schemes investigated;

the resulting automation project is the Ingewald Spires Slide Indexing System (ISSIS) which makes use of SPIRES (Stanford Public Information Retrieval System). ISSIS has successfully been used to generate indexes by various sort fields, depending upon the subject matter being searched; it also prints labels (standard size but reduced to proper slide size by xeroxing). At present ISSIS uses three tapes to store records: FRITZI (for manuscripts) SLIDES (for Wester Art 4th-19th century) and SLIDESTO (for Western art of the 20th century).[4] Since many of the programs discussed in this paper concern themselves with manuscript slide collection tests, a detailed look at FRITZI may prove the most instructive. FRITZI allows the entering of information on a possible sixteen fields, although only eight of the fields are printed onto the label. An example Ms. Wald sent to me may prove interesting:

Field	Line	Computer Term	Available characters	Sample
1	1	area	w/field 2&3 and 4&up	050
2	1	cutter # library	up 34	N532
2a	2	name of library	up to 34	New York, NY Pierpont Morgan Library
3	1	mss #	combined up to 34	MM0001
3a	3	folio information	combined up to 34	M.1-FC
3b	3	title		Lindau Gospels in Latin
4	1	different views		2
5	4	keyword	combined up to 34	Crucifixion
6	4	notation of field 4		detail
7	5	author/artist	up to 34	by & illum.(?) by Folchard, St.Gall
8	6	accession number	combined up to 34	1.83.290
9	6	date		IX Century
not printed on label				
10		bibliographic information	up to 110 characters printed on 3 lines	224 leaves(320x253) no miniatures, 4 title & 4 incipit pp., 12 canon tables

The final column "sample" above, is of course the sample of data entry on one slide. The amount of information given per slide in the generated index is as complete as possible and allows for extensive searching.

The only difficulty for schools wishing to use SPIRES, a very sophisticated computer program, is that its computing center must have access to an IBM370/168 or NASCO AS/6. Spires has on-line capacity, which does make this system a highly desirable one, and was one of the reasons that Gail Kana, former slide curator at the College of Design, Visual Resources Collection at Iowa State University, also chose SPIRES when in 1980 the College of Design decided to implement an automation project. However, the current curator, Marilyn Kerner, has informed me that their project is presently at a stand still. The cost to the school versus its present usefulness has caused the reevaluation of that project.

Also concerned with manuscript slides is a very recent project being carried out at the Ohio State University Department of the History of Art under the direction of the curator of the slide and print collection, Mark J. McGuire. Much of the cost is being underwritten by the Digital Equipment Program which requested Ohio State University to help devise and test capabilities of GIGI terminals and accompanying software. GIGI is a system capable of drawing posterized line drawings and geometric images in eight colors, the terminals supported by a DEC VAX mainframe and related storage systems and software. The slide library professionals are not computer experts and have been given little assistance from the company, so the actual pace of slide information entry has been slow, as the staff must teach itself how best to use the computer system. The pilot test has concentrated on indexing the manuscipt slides in the collection (c10,000) as well as putting the artist/architect authority file on-line. Trial printouts of the manuscript collection include basic information. A sample printout is shown below:

Mss.Title/OSU call no.	Present location/Mss.no.
Albani Psalter G2M ZX12AP C6	Hildesheim, Treasury of St.Godehard
Albi Gradual G2N ZX11AG C3	Paris, Bibliotheque Nationale, Lat.776

As a greater understanding of the feasibility of GIGI used in the slide collection is attained, no doubt there will be greater information and sorts attempted if the need for such is felt. It is fortunate that all equipment

being used during these tests will become the property of the University at the end of the test project; and that the idea of automating the slide collection has prodded the administration even to consider the idea of using other database management systems within the slide library should GIGI prove to be unsuitable.

In 1982 Eileen Fry, slide librarian at Indiana University, gave a paper at Mid America College Art Association conference, telling of her project to tackle the problems presented in the cataloguing of manuscript slides and small-scale Greek sculpture.[5] Ms. Fry began entry of the information of slides of manuscripts in the Indiana collection and added even more information into the databank than was actually listed on the slide label. Using her own personal Osborne computer, Ms. Fry found that indeed her personal computer could hold the information on that part of Indiana's large slide collection and generate valuable indexes. The indexes produced by the Osborne allowed the call up of information alphabetically by author, title, city location of manuscript, museum location of manuscript, manuscript number and proper name (a kind of keyword list, limited to personal name only) and the style of the manuscript. An illustrative sample is given below to show the use of the index generated for alphabetical listing by author.

Author	Title	City	Museum	Shelfmark	Proper Name	Style
John Chrysostom,St.	Homilies	Paris	Bibl.Nat.	Gr.923		Byz
John Climachus		Mt.Athos	Stavronikt	50		Byz
John Climachus	Heavenly Ladder	Mt.Sinai	St.Cat's	418		Byz

The information provided is not as extensive as the SPIRES project provided, but it is obvious from an overview of the many attempts, that each collection must decide which are necessary sort fields for the various subjects and make the decisions based partially on type of computer and storage method used. Ms. Fry noted as a drawback to using a microcomputer that her own used single density discs with 92K of usable space; however, since then she has informed me that she was able to convert her Osborne to use dual density discs, increasing data entry capacity.

Ms. Fry also noted the same difficulties in locating slides of small Greek sculpture in the collection. In this case she also initiated a program to produce indexes with all the pertinent information for location of those slides. By working with her own computer, Ms. Fry may be able to prove to her administration the efficiency and patron assistance provided by the generated indexes. Perhaps such proofs may help the administration put priority on assisting slide library automation projects, whether turning to the use of microcomputers or using the general university computer services.

The areas of manuscripts and classical sculpture seem to be favorite targets for pilot automation projects in general art history collections. But schools of architecture realized early that the multiplicity of their visual materials and the varying ways in which the slides are used create a great need for often very complicated indexing and searching. As early as 1973 the School of Architecture at Ohio State University had implemented a slide retrieval program,[6] and in 1975 the School of Architecture at the Victoria University of Wellington put out a working paper on "Integrated Slide Classification: A proposal for an interdisciplinary slide indexing and retrieval system."[7] The School of Architecture and Planning at the University of Wisconsin/Milwaukee experimented with a very complicated and theoretically inspired program called SPIN in 1978.[8] Also in 1978 Mod Mekkawi with Laura Higgins Palmer and Woodrow W. Lons, Jr. devised SLIDEX for the Architecture and Planning Library at Howard University Libraries, Washington, D.C.[9] SLIDEX, a "Slide Indexing Retrieval System" takes the approach first of filing slides, not by any attempt at subject matter categorization, but simply by accession number; retrieval is made possible by the use of the computer generated indexes.

Architectural schools have continued to put a great deal of energy into automation. The SLIDEX system, somewhat modified by the use of limited coding with the Tansey system, has been implemented at the Architecture Library, Mississippi State University, under the direction of librarian Tom Henderson. The library has currently entered information on 12,000 slides in the collection, and at this time indexes can be generated alphabetically by location, by date, by building type, by architect, description and medium. A very interesting adjunct to this project is that the Architecture

Library also has photocopies of the slides in the collection which are filed in loose-leaf notebooks and arranged in general chronological order. This is a particularly happy arrangement for architecture faculty looking for slides that may show such diverse things as texture coating of interior walls, indoor lighting, street signs, use of reflecting pools, the "logic of function" and other architectural ideas and concepts so difficult to verbalize, indeed, often impossible to fully describe. The Mississippi State project is funded primarily by the School of Architecture, although the University Libraries share computer costs.

Another architecture school project has been undertaken at the School of Architecture, Florida A & M University, under the direction of slide curator Leigh Gates. Their total collection of 25,000 slides has been entered and indexes generated; however, a general revamping of the program to allow for more extensive sorts, along with changing from floppy to hard disc storage has the project somewhat in a state of flux at the present time. One of the most valuable assets of the program noted by Ms. Gates is the printing of labels with their Epsom micronprinter.

Work in larger collections is also currently underway. Susan Solomon, slide curator at the School of Architecture, Princeton University, took over the organization of that collection in 1981; her reasons for entry into computerization were somewhat different than those usually given. Having found difficulty in locating a good microtypewriter, she noted that she "literally fell into computerization, the most appealing aspects being that a single typed entry could yield cross-reference indices, shelf lists, accession files, and even labels."[10] The University and the University Computing Center were very supportive of the project and a program using the University's main IBM computer with their editor SCRIPT was put into effect. A great deal of information about each slide could be entered: accession number, classification number, architect/firm/artist/author, site-country, site-region/state, site/city, building name/title, type/subject, medium, material, style, date, view, keywords, collaborators and individuals, nationality, previous name, previous use, century, view date, slide source and slide site. SCRIPT allows up to nine different indexes, each sorting on no more than three points. Unlike the money difficulties encountered at

Iowa State University, Princeton academic budgeting allows computer time as 'funny money', readily available funding that is a bookkeeping change within the University.[11] The money spent by this slide collection was actually only that of purchasing a dumb terminal to hook into the mainframe IBM computer. As in all cases of automation, the salary of the persons entering the data must be taken into consideration, but Ms. Solomon minimized this by devising a coding sheet which she could easily train student workers to use.

Princeton also recently purchased a laser printer and the slide library of the School of Architecture has begun to receive computer generated labels. Like Cornell, the process is to reduce the normal size printed labels by xeroxing and then cut to size. This process has been berated as an inefficient process. But the programs such as the one used by Leigh Gates at Florida and the one named VIREO (which will be discussed later) have eliminated this reduction step. My colleague at the University of New Mexico, Sheila Hannah, has in the past few months written a program for an IBM Personal Computer and IBM dot-matrix printer to provide the correct size labels.[12] The paper will be submitted for publication to the International Bulletin for Photographic Documentation of the Visual Arts this summer.

Most of the collections discussed so far are in state universities and have access to, whether or not they use, a general university computer services center. An interesting undertaking of which I recently learned is a project being carried out at a private college, Columbia College Chicago, directed by audio-visual librarian Paula Murphy. Ms. Murphy had formerly worked in the library audio-visual collection at a private school, and had automated that collection using a modified Tansey system. When she accepted the position at the Columbia College Chicago, she was able to bring both expertise and the enthusiasm of knowing that an automating system was a desirable one to implement and convinced her administrators of its worth. The actual computing work is handled by a computer professional outside the college, contracted with on an individual basis. The college, still growing, does not yet have its own computing center, and Ms. Murphy's suggestion of using an outside agency led to this very sensible solution.

As many of the other automated indexing projects do, the CCC library system uses eight major field sorts: call number, artist last name, initials, title of work, date of work, medium, color code (if the slide in the collection is in color or black and white) and accession number. The collection, still young, contains approximately 18,000 slides, all completely entered, and the project will no doubt continue with the growth of the collection. The slide filing system used at the college is efficient enough to permit art faculty members to easily locate what they need, and these faculty use the indexes infrequently; but students and faculty members from other disciplines have found the indexes of great value.

It is logical that some of the most innovative advancements in the use of automation in visual resource collections have been made by private companies and scientific academies. The Academy of Natural Sciences in Philadelphia has within the last year developed files on its ornothological slide collection with a program entitled VIREO (Visual Resources for Ornithology). The programs have been developed on an IBM Personal Computer using dBase II as the program language. Files are kept which give detailed descriptions of each slide, one of species, a taxonomic file, and a donor's file. VIREO represents a program easily transferrable to the needs of art visual resource libraries in the simplicity of its approach and the large amount of information allowable per entry.

Much of the funding for the project came from various grants and donors. The software programs were written either by director Dr. J.P. Myers, or Martine Culbertson, the slide librarian who oversees the VIREO project. Programs have been written to allow for complex searches, and of special interest is their use of their program "LABELS." As mentioned earlier, labelling needs appear to be a difficulty for some projects. VIREO uses labels produced by Avery Label, Inc., tractor-fed and of the standard slide label size. VIREO, approaching the automation of a slide collection concerned with taxonomical materials, can be studied in detail with advantage to art and architecture slide collections.

The increasing popularity of the concept of the use of a videodisc in visual collections seems to be the logical next step for many of the libraries concerned with automation. Use in researching whole museum collections gathered onto videodiscs provided by those various museums, use in researching slides actually available in a particular slide library, and even use as a student review tool have all been attempted in the past few years. Julia Hausman, slide librarian at the University of Iowa, working closely with the Weeg Computing Center on campus has been attempting a project for a study videodisc for use by students. At the time Ms. Hausman discussed the project at the Mid America College Art Conference in October 1982, the attempt was still in the beginning stages.

The University of Iowa was fortunate in incurring comparatively little computing costs in this project due to the interest of the Weeg Computing Center in using the project as a trial of its own. The uses of videodisc storage of slides could be of great use in the sciences as well, and the Department of Art & Art History slide collection project interested them. As fortunate in having funding has been the automation project of the visual resources as a major part of the series of the documentation of Islamic architecture which was begun in 1979, funded by a grant from his Highness the Aga Khan. Margaret de Popolo, Coordinator of Library Programs at the Aga Khan Program for Islamic Architecture, described the early automation project which used a database FOCUS (Information Builders, Inc.), a "fourth-generation database management system operating through CMS on an IBM 370/168 mainframe computer."[13] That database contained information on construction and statistical data, bibliographical citations, and indexed visual materials on contemporary architectural projects in Islamic cultures. But, again, the goals of the program are more ambitious. The end goal is the creation of a visual information system for Islamic architecture which will be composed of a computerized database of identifying, descriptive and bibliographic information linked to a videodisc for the storage and display of images. The results of such projects should make it easier for similar attempts in the future.

Many automation projects are currently being contemplated or actuated here in the United States, making use of various types of computers and often aiming at different goals. The few mentioned in this paper are all too inadequately discussed, but the intent of the paper was to acquaint the audience with the variety of projects going forward. There is still a definite need for increased communications among slide libraries, noting new projects, successes and failures. With the growth of such organizations as the Image Access Society it is to be hoped that much more communication will be seen, for this will further the utilization of automation in visual resource collections as a teaching aid, research assistance, and the elimination of many clerical tasks.

REFERENCES

1. Richardson, Zelda and Sheila Hannah, eds. Introduction to Visual Resource Library Automation. Mid America College Art Association, 1980.

2. Scott, M. Elizabeth. "Computer Application in Slide Collections." unpublished paper delivered at ARLIS/NA, San Francisco, 1981.

3. Wald, Ingeborg. "The Evolution of the Cornell Spires Slide Indexing System." Art Documentation. Vol. 1, No. 1, February 1982, pp.13-15.

4. ----------. ISSIS Manual. Cornell University, 1982.

5. Fry, Eileen. "The Osborne-I Microcomputer: Feasibility for Use in Organizing and Classifying Slides." Paper delivered at Mid-America College Art Association Conference, October, 1982. Published in in supplement to International Bulletin for Photographic Documentation of the Visual Arts, Volume 9, No.4.

6. Richardson and Hannah, pp. 109-124.

7. Block, G. Working Paper No. 1 "Integrated Slide Classification: A proposal for an interdisciplinary slide indexing and retrieval system. School of Architecture Publications, Victoria University of Wellington, New Zealand, 1975.

8. Richardson and Hannah, pp. 134-139.

9. Mekkawi, Mod and Laura Higgins Palmer and Woodrow W. Lons, Jr. "SLIDEX, A System for Indexing, Filing and Retrieving Slides and Other Visual Aids." Washington, D.C.: Howard University Libraries, 1978.

10. Solomon, Susan G. "Putting Together an Architectural Slide Collection: Computers, Classification, Co-Existence." Paper delivered at ARLIS/NA Conference, February, 1983.

11. ----------. p.8.

12. Hannah, Sheila. "SALL-PC: A Software Package for Processing Accession Sheets, Slide Labels, and Shelf List Cards on the IBM Personal Computer." Unpublished paper, 1983.

13. del Popolo, Margaret. Correspondence, May 1983.

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ARLIS/ANZ and art libraries in the Antipodes

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ARLIS/ANZ Art Libraries Society / Australia New Zealand was formed in August 1976. Since then, ARLIS/ANZ has arranged a number of seminars and workshops for art librarians in both countries; found finance to bring three noted art librarians to the antipodes to give talks and workshops which stimulated both members and other interested professionals; and has published thirteen issues of ARLIS/ANZ News. ARLIS has served as a valuable support for art librarians working in isolation, at great distance from international centres of publishing and art activity. Distance between ARLIS/ANZ centres led to the formation of local interest groups and cooperation between art libraries in art galleries and museums, universities, schools of art, and national resource libraries.

In October 1982, Canberra's splendid Australian National Gallery was formally opened by the Queen, generating an infectious wave of excitement felt throughout Australia and spreading to other countries, including New Zealand. A national gallery for Australia had been included in architect Walter Burley Griffin's 1912 plans for this new capital city, but it was not until 1970 that a site was finalised, architects appointed and final planning begun. A magnificent building, standing on the lakefront adjacent to the equally distinguished High Court and National Library buildings, the ANG, as it has already been acronymed, may be seen to symbolise the coming of age of the arts in Australia.

To celebrate this event, the ARLIS/ANZ executive moved to Canberra, following two years each in Melbourne, Sydney and Auckland. In Canberra an active group of art librarians, stimulated by the acquisition of no-expense-spared accommodation for the relatively young, but well-funded and fast growing collection of the ANG Library, were already planning an ambitious programme for the coming two years.

Background

A review of the first years of a professional association in the antipodes, as Australia and New Zealand are often collectively described, must begin by considering the geographical aspects that have influenced the development of the comparatively young countries. These aspects have particularly affected the growth and development of the arts and of libraries.

Australia is a country as large as the whole of Europe, but with a population of only 15 million people, most of whom live in the fertile coastal areas of Victoria and New South Wales, in the south east. Much of this vast continent is harsh and resource-rich desert-type country with considerable distances between the major cities in each of the six states and the capital.

New Zealand is a country about the same size as the United Kingdom but with a population of only 3 million people, most of whom are to be found in the northern half of the North Island. Mountain, bush and alpine regions make much of the South Island uninhabitable, and a population of about 90 million sheep indicates the major resource, farming and primary produce.

Contrary to popular belief, that New Zealand is just offshore from Australia, the distance between the closest cities, Sydney and Auckland is similar to that between London and Athens, 1,300 miles. Transportation costs keep most people at home. For instance, the current cheaper return airfare between Auckland and Sydney is NZ$880.00 (£200). However, both countries boast scenery of much natural beauty and a temperate climate offers a lifestyle envied by many living in more densely populated countries.

The term antipodes (those who live at the other side of the globe), has been often used by those discussing the relationship between Australian and/or New Zealand culture and that of Europe, as a form of remoteness. Until very recently, artists continued to feel

strongly influenced by their European ties. This is reflected in the art histories of both countries, which begin with the view of the landscape recorded by artists travelling with early explorers during the late 18th century, a very European view. The art of the long-settled indigenous New Zealand Maori and Australian Aborigine was largely ignored, although both fascinated artists and were frequently depicted. It was not until the 1940s and 50s that artists sought to develop an art which expressed their own national identity. This may be illustrated by quoting from the Antipodean Manifesto, drawn up by a group of Melbourne artists for their 1959 exhibition:

> "For Europeans this country has always been a primordial and curious land. To the ancients the antipodes was a kind of nether world; to the peoples of the middle ages its forms of life were monstrous; and for us, European by heritage (but not by birth) much of this strangeness lingers. It is natural therefore that we should see and experience nature differently in some degree from the artists of the northern hemisphere."[1]

There was, however, a need for artists to feel that their work was recognised by their European peers. A series of exhibitions of Australian art held in Europe and America during the early 1960s, including the Antipoean Vision exhibition at the Tate Gallery in 1962, 'confirmed that for the first time Australian artists had an international audience that was sympathetic and receptive'.[2]

During the sixties and seventies the dramatic economic growth of Australia and, to a lesser extent, New Zealand, was reflected in a blossoming of the arts. The formation of government funded arts councils in both countries provided sponsorship which enabled those involved in the arts to travel and work with far fewer financial constraints. There was a noticeable increase in national self-confidence, a sense of maturity, which, it seems to me, was

reinforced by the enthusiastic response to the opening of the ANG last October, in a year which included a host of international visitors for the Sydney Biennale, among them Judith Hoffberg, and the Women's Art Festival.

Libraries

Compared with the long-established libraries in Europe, the collections in Australian and New Zealand libraries are very young. The first were established, as were the oldest universities, during the second half of last century. During its centenary celebrations in May this year, the University of Auckland Library added its millionth book. The first 500,000 took 75 years to acquire, the second 500,000 were added during the last 25 years, which illustrates the dramatic growth of library collections during the sixties and seventies. As in other western countries, large injections of government funds were made available to the institutions, particularly in the tertiary education area. Rapidly developed library collections and more specialist library services were needed to support this growth, which included many new areas of research, not least of which was the study of art and art history.

Many new specialist collections were set up, not only in the educational institutions, but also in art galleries, museums, resource centres such as the arts councils, and professional offices. Not the least of these was the Australia National Gallery Library. These art libraries needed to be built from very small bases, buying both old and new, original and reprint, while providing a good library service to a more and more demanding clientele. Art librarians, untrained in their specialty because no course in art library education was and is, available in either country, found themselves competing against better-funded american libraries who were weeks closer to the market.

It is normal for parcels to take more than 10 weeks to arrive from either Europe or North America; the February issue of Artforum arrives in May which means airmail costs have to be considered for the most important serials; an issue arrives too late for us to claim the missed intervening issue; booksellers lists arrive long after important titles have been sold.

The advent of ARLIS in 1969 was a much-needed catalyst and something of a saviour for art librarians working in isolation far from international art and art publishing centres.

ARLIS/ANZ : the first seven years

In her creditable library school essay written in 1977, Christine Downer reviewed the role of ARLIS in the U.K., U.S.A. and Australia, commenting that

> "ARLIS's contribution has been to the growth of art librarianship by giving those librarians engaged in this field a sense of identity through a professional association which they may not have had through their usual associations."[3]

This need for a sense of identity was surely demonstrated by the growth of ARLIS/NA during its first two years, to over 700 members in 1974.

It is not surprising then, that art librarians in Australia and New Zealand were keen to set up a similar association. Following preliminary meetings in both countries, over 30 art librarians gathered in Sydney on 19 August 1976 for the inaugural meeting of ARLIS/ANZ. The beginnings have been well documented: by Christine Downer, by Sue Boaden in her report to the Australia Council on the Arts information in Australia seminar held in Hobart in September 1977[4], and in an informal paper given by Noele Turner at the IFLA 1980 conference in Manila.[5] I am indebted to all three for information included here.

Decisions taken at the inaugural meeting set a pattern for ARLIS/ANZ activities since: the adoption of a Constitution based on that of ARLIS, and with similar aims:

"(a) To promote art librarianship, particularly by acting as a forum for exchange of information and materials.

(b) To promote development of art library resources in Australia and New Zealand.

(c) To cooperate with other national and international organizations in the field of art, including ccoperations with AACOBS."

Also, to arrange annual seminars allied to larger national groups so that members would be able to justify the expense of attending (i.e. Library Association of Australia LAA, Art Association of Australia AAA, New Zealand Library Association NZLA, Art Museums Association of Australia AMAA); to publish a newsletter; to rotate the executive from centre to centre each two years; set an annual subscription of A$5.00; and, to encourage membership.

I would like here, to pay tribute to Joyce McGrath, Fine Arts Librarian, State Library of Victoria in Melbourne, elected first chairman of ARLIS/ANZ. Joyce had convened the preliminary meetings held in August & December 1975, steered the association through its difficult first two years, has watched over successive executives, and is presently the ARLIS/ANZ representative to the IFLA Art Libraries Section. The first executive was from Melbourne, including art librarians from state, university and institute of technology art libraries.

Once in office however, the Melbourne executive found itself faced with a number of problems to be overcome before getting the fledgling association under way: small membership, long distances between interested centres (Sydney, Canberra, Adelaide & Hobart in Australia, Auckland and Wellington in New Zealand), and insufficient funds to plan either a publications or seminar programme. Happily,

rescue came from the Sydney based Museums, Arts and Humanities Group (MAHG) which had been active since 1975 when Sue Boaden, Australia Council librarian, had taken the initiative to arrange regular three monthly meetings of New South Wales people involved in arts information. With the aid of a grant from the Visual Arts Board of the Australia Council, MAHG organised the first seminar in which ARLIS/ANZ was involved, held during the 19th biennial conference of the Library Association of Australia, in Hobart, September 1-2, 1977, with a thematic title National Arts Information in Australia Seminar, and the added bonus of Antje Lemke, Professor of Art Librarianship at Syracuse University, N.Y. as keynote speaker.

This very successful seminar and the ensuing visit of Professor Lemke to Sydney, Canberra and Melbourne, served to establish ARLIS/ANZ as a viable entity. By the time the executive moved to Sydney in August 1978, annual seminars were being planned, continuing sponsorship by the Visual Arts Board ensured that other international esteemed art librarians could be invited to share their expertise with members, and five issues of ARLIS/ANZ News had been published.

Guests and seminars

Art librarians in Australia and New Zealand owe a considerable debt to Antje Lemke, Stanley Hess, Philip Pacey and Judith Hoffberg, each of whom gave unstintingly of their time and energy during their sometimes exhausting tours. Each spoke to many interested people in a number of centres, presenting carefully prepared papers, and also offered advice on ARLIS matters, encouraged members' input to international art librarianship, and greatly enhanced the standing of ARLIS/ANZ and its members in their local communities.

Stanley Hess, reporting back following his 1978 tour, stated that

> "This and similar exchange visits among librarians from throughout the world are of great importance in the development of library services, ideas and professional

standards as well as the exchanges of subject specialists' information."[6]

Then Picture Librarian, Cleveland Museum of Art, Stanley was keynote speaker at the first joint ARLIS/ANZ & AAA meeting in Melbourne, August 1978, with a paper entitled Art libraries and visual resource collections in North America : the American experience with some words of advice. Seminars on slide collections in Melbourne, Canberra and Sydney followed, then Stanley continued on to Auckland to speak to an interested group there.

Encouraged by the numbers at these workshops, the Sydney based ARLIS/ANZ executive arranged a more ambitious programme for Philip Pacey in August/September 1979. With grants from the Visual Arts Board of the Australia Council and, for the first time, the Queen Elizabeth II Arts Council of New Zealand, Philip was keynote speaker at the seminar held during the 20th biennial LAA conference in Canberra, then travelled to give workshops in Sydney, Melbourne, Adelaide, Perth and on to New Zealand to Auckland and Wellington. Philip's paper Vive la difference! the uniqueness of art libraries, discussed a number of matters including art library power, seen as

> "the power to nurture the appreciation and practice of the arts, to help release the artist in everyman, to preserve the identity of and constantly revivify all those living traditions whose variety enriches the world we live in while at the same time startling the arts from the paralysis of provincialism."[7]

Advice on ARLIS matters from the chairman of ARLIS, international progress, the need for ARLIS/ANZ contributions to Art Libraries Journal, and on material found lacking in Australian and New Zealand art libraries, was well received in all centres.

The April/May 1982 tour by Judith A. Hoffberg, co-founder and first executive secretary of ARLIS/NA, publisher of Umbrella, and Artist's books expert, was even more extensive. With sponsorship

from the Arts Councils continuing, Judith attended the Sydney Biennale in April (this was co-orgnised with Art Network[8]) then, as guest of ARLIS/ANZ Judith headed workshops in six centres in Australia and five in New Zealand. Many of these were attended by artists, particularly those making books, women artists and those promoting the arts. Judith's visit served to draw art librarians closer to the arts community. Several reports on her tour have been published.[9, 10, 11]

Since 1977, ARLIS/ANZ has held successful seminars each year, alternating between LAA and AAA conferences. Although between 30 and 50 people attended these workshops, the expense of getting there proved too great for many. This encouraged local interest groups to meet and arrange their own seminars. MAHG's contribution has been mentioned. In New Zealand, following an informal meeting at the 1975 NZLA conference, the New Zealand group arranged day seminars at each of the three following NZLA conferences, Wanganui in 1977, Auckland 1978 and the annual ARLIS/ANZ seminar in Christchurch 1979 at the first joint LAA/NZLA conference. Themes for these seminars related to New Zealand art and architecture.

ARLIS/ANZ News

Thirteen issues of ARLIS/ANZ News had been published by the end of 1982. No.1 published in May 1977, was a two-sheet typescript which included only notes about ARLIS activities. No.13, December 1982, by comparison, included 6 articles on Canberra art libraries, 2 articles by Wellington contributors, as well as ARLIS/ANZ news and notes. The intention to publish quarterly has been a difficult goal. New Zealand executive editors had little response to calls for local material for publication. The lack of funds to produce a professional looking journal also hampered regular publication.

A review of material so far published though, shows that a worthwhile contribution to art librarianship in Australia and New Zealand has been made. Much of the material for this paper has come from this source.

The appointment of an editor by the present executive, shows that continuation of the journal is seen to be important. Better funding by raising the subscription should result in better production methods, & together with a subscription drive, should increase the circulation further afield than the present ARLIS/ANZ membership, and encourage further contributions. It may be more realistic for a twice-yearly publishing goal to be set, however.

Art libraries in the antipodes

As in other western countries, the art libraries in Australia and New Zealand can be found in the following groups: national and state library collections; art libraries and visual resource collections in tertiary education institutions; reference libraries in art galleries and museums; resource libraries for professional groups and companies. If I describe the collections in New Zealand in greater detail, it is because I know them well. Their counterparts may be found in all of the major centres in Australia, usually with larger collections, much better funded, and certainly better staffed.

The Alexander Turnbull Library in Wellington, part of the National Library of New Zealand, has as its policy, a national responsibilty for collecting art library materials. This includes an active encouragement of New Zealand artists of national importance to deposit their personal papers in this collection; there is an art collection of historical importance and the library has a large collection of photographs. Like the Hocken Library, University of Otago which collects similar material, the Turnbull Library began with an endowed collection. In Australia, the Mitchell Library in Sydney and State Library of Victoria fulfil similar roles. There, the National Library of Australia has assigned a low priority to the arts [4] which means that a national art collection is lacking. ARLIS/ANZ has shown some interest in moves to cover this lack.

The largest number of art libraries are to be found in tertiary education institutions, providing the resource needs of art students, art history students, architecture students and their academic staff. Art Librarians from these libraries and those in art galleries and museums, form the largest group of ARLIS/ANZ members. In Australia and New Zealand these specialist libraries are relatively new. For instance, Auckland: the Auckland Institute & Museum Library was staffed from the early 1950s, the Architecture Library of the University of Auckland from 1952, the Fine Arts Library, also of the University but serving an art school set up in 1890, from 1962, and the Auckland City Art Gallery library from 1965. Visual resource collections are either within these libraries, or are more recent. Similar libraries can be found in Australia. In both countries the major growth has been within the past decade, which means that they are finding the cut-backs and climbing prices of art library materials more difficult to cope with than, say, similar libraries in North America which had established a firm base before the sixties.

Resource libraries also emerged during the rich sixties and seventies. As in Australia, the libraries developed as resource centres at the Queen Elizabeth II Arts Council of New Zealand and the Crafts Council of New Zealand, were set up to provide a national resource for arts and craftspeople. Design has fared less well in both countries; neither have national design resouce centres, a matter which should be of concern to ARLIS/ANZ.

In addition, architects, planners and designers have found it useful to set up reference libraries within their partnerships. Those who have appointed professional librarians have found this to be an advantage, but some encouragement is needed. In Auckland, a number of these collections were set up under the consultancy of Lillian Cumming, the first Architecture Librarian.[12]

Conclusion

The decision to review the constitution, taken during the AGM at the 21st biennial LAA conference in Adelaide in August 1982, was timely. Centres not involved with ARLIS/ANZ executive activities have felt isolated from the association. The formation of local Chapters, able to arrange their own programmes, will mean that a greater number of members can be involved, and will also mean that the executive would be able to call for assistance from a group rather than individuals when planning seminars in distant centres. The Sydney-based MAHG will become the first Chapter. This should also lead to a much-needed increased membership.

Art library education has been a concern of ARLIS/ANZ. No library school in either country offers an art specialisation. Some moves have been made to interest those planning courses in art libraries. One such, is described by Josie Powditch of the Art Gallery of South Australia, where, with assistance from ARLIS/ANZ, a number of library school students undertook a series of projects in the gallery's art library.[13]

When the Parr Committee was set up to investigate tertiary art education in Australia in 1979, the committee interviewed four art librarians, all members of ARLIS/ANZ, and was presented with a copy of Art library manual, as noted in their report.[14]

Recently, I was asked to advise on the staffing of an art gallery library, and was able to send a copy of the ARLIS/NA Standards for staffing art libraries, for use as a guide.

These instances show the value of ARLIS to art librarians in the antipodes. Much has been achieved during the first seven years of the association's existence. Changes made following the present review will involve more members in ARLIS/ANZ activities. We are not there yet, but I am confident that a review at the end of the tenth year will show that ARLIS/ANZ has come of age.

References

(1) CATALANO, Gary. The years of hope : Australian art and criticism 1959–1968. Melbourne : Oxford Univ. Press, 1981. p.204.

(2) HAESE, Richard. Rebels and precursors : the revolutionary years in Australian art. Ringwood, Vic. : Allen Lane, 1981. p.288.

(3) DOWNER, Christine. The role of ARLIS in the growth of art library networks in the United Kingdom, the United States, and Australia. in ARLIS/ANZ News no.4, Apr. 1978.

(4) BOADEN, Sue. Report of Arts Information in Australia Seminar, Hobart, 1–2 September 1977. Sydney : Australia Council, 1977. p. 1,3.

(5) TURNER, Noele. Report on the International Federation of Library Associations and Institutions (IFLA) 46th Annual Conference at Manila, Philippines from 18/23 August 1980. in ARLIS/ANZ News no.10 Jan 1981 p.31–2.

(6) HESS, Stanley. Melbourne in retrospect. in ARLIS/ANZ News no.7, Aug. 1979. p.13.

(7) PACEY, Philip. Vive la difference! the uniqueness of art libraries. in ARLIS/ANZ News no.8 Jan. 1980 p.17.

(8) ART NETWORK. (a quarterly journal devoted to contemporary art in Australia and New Zealand) from: P.O. Box 439, Broadway, Sydney, Australia. $20.00 p.a. overseas.

(9) HOFFBERG, Judith A. Australia and New Zealand : on the road with jah. in Umbrella v.5 no.3 May 1982 p.49–55 & v.5 no.4 Sep 1982 p.77–81.

(10) HUNTER, Ian. Interview with Judith Hoffberg. in AGWANZ News v.13 no.2 June 1982 p.2–5.

(11) RICHARDS, Valerie. Judith A. Hoffberg in New Zealand : a report. in ARLIS/ANZ News no.12 Aug. 1982 p.4–7.

(12) CUMMING, G. Lillian. A tribute. in ARLIS/ANZ News no.12 Aug. 1982 p.8.

(13) POWDITCH, Josie. Learning by experience. in ARLIS/ANZ News no.10 Jan. 1981 p.3–8.

(14) TERTIARY visual arts education in Australia : a report to the Visual Arts Board / by a study committee under the chairmanship of Geoff Parr. Sydney : Australia Council, 1980. p.56–7.

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The Art and Architecture Thesaurus Project

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IFLA Munich Conference

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The Art and Architecture Thesaurus Project

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INTRODUCTION

Six or seven years ago when the strength of computers was being recognized as a partial solution to information access problems, there was concern that subject access was a problem not easily solved by automation. Full text searching, being able to search an entire journal article not just a citation, only compounds the problem. The words, lead and lead, a verb and a noun, are spelled identically in English and are indistinguishable to the computer. Although significant research is being done to solve the problem, we are years away from practical applications. Traditional subject indexing, which uses terminology such as the Library of Congress subject headings, is totally inadequate. Massive changes in subject indexing are required in order to make full use of automated systems. Not only do the terms themselves need to be changed to provide a more accurate and detailed picture of the material being indexed, but the structure of the terminology, the way it is used, issues of

pre- and post-coordination all must be addressed. The Art and Architecture Thesaurus is a first and necessary step in that process of change. This thesaurus is being created not only to solve these problems for the subject fields of art and architecture, but also to provide a potential model for thesauri in other fields.

ASSUMPTIONS

A thesaurus is a controlled list of terms arranged either alphabetically or arranged with terms grouped by concepts or relationships. Even within strictly alphabetical lists, cross-references between related terms are normally provided. A thesaurus has two distinct organizational functions - and serves at least two types of users. It is first an indexing tool used by cataloguers, indexers and others who use the terminology to identify and label concepts within a bibliographic item, or in the case of museum registrars or slide and photograph curators, it offers the means to identify and describe an object or visual representation of an object. The second function of a thesaurus is information retrieval. The vocabulary must be structured in a way that not only allows indexers to label and organize information but also allows users to find it again. This aspect, of course, goes beyond the actual subject terms themselves and involves the syndetic or cross-reference structure, sub-divisions or facets and other refinements which distinguish such a vocabulary from a simple list of words.

The Art and Architecture Thesaurus, or AAT, intends to serve those indexing and retrieval functions and to go several steps further. The AAT is being designed around several non-standard assumptions:

first - the vocabulary will be applicable to both manual and online environments. This self imposed requirement provides one of the greatest challenges we, as its designers, face.

second - the vocabulary can be applied to bibliographic and non-bibliographical material -- the latter for us means slides, photographs and other visual material as well as the objects themselves. Therefore, the thesaurus can be used by book and journal librarians, slide and photograph librarians, as well as museum registrars and curators.

third - the thesaurus will contain three displays of terms, hierarchical, alphabetical and permuted.

fourth - the thesaurus is being designed for no specific collection, be it a library or a museum, but as a standardized vocabulary useful in English language countries. We foresee a time when a multi-lingual version will be created as well.

fifth - we chose the U.S. National Library of Medicine

thesaurus, called MESH, as our model. This vocabulary is hierarchically arranged and is being used in both online and manual environments.

sixth - we are not dealing with iconography nor with proper names. Although work must be done in these areas, it is beyond the current scope of our project.

HISTORY

Late in 1978 an architectural historian at Rensselaer Polytechnic Institute called a group of people together in New York City to address the question, "Isn't there a better, more universal way to classify slides?" The answer to that question was rather a simple no but the reason for the answer sparked three people's imaginations. It was clear to us that you cannot classify that which you cannot describe. There was, we realized, no adequate national, much less international, vocabulary to describe or index architecture materials - and we suspected the same was true for art.

The three people orginally involved in the project were Dora Crouch, the architectural historian I referred to, Toni Petersen, then Executive Director of RILA, an abstracting and indexing service, who is now Library Director at Bennington College in Vermont, and myself, Associate Director of Libraries at

Rensselaer Polytechnic Institute. We coalesed around this problem and operated successfully together for over four years. We have received nearly half a million U.S. dollars to date from both government and private sources. Currently, and for the foreseeable future, we are funded by the J. Paul Getty Trust. The Trust is a private endowment based in Los Angeles, California which is having a significant and positive impact on the field of art world-wide.

THESAURUS CONSTRUCTION

Our work to date has focused on establishing a methodology and applying it to the first of the three sections of the AAT. The sections are architecture, 2 and 3-dimensional arts, and decorative arts. We began with architecture because there were several good vocabularies available and because it seemed to be one of the more finite of the three.

Through cooperation with the Royal Institute of British Architects we obtained a copy of their index vocabulary in machine readable form. The Avery Index at Columbia University gave us a tape of their terminology and the RILA indexing and abstracting service provided us with a tape of its terms. The Society of Architectural Historians Journal index and the Picture Archives of Canada Architecture Thesaurus terms were both obtained and converted to machine readable files. In addition, we created a database of relevant terms from the Library of Congress Subject Headings (LCSH), 9th ed., and its supplements. With the

six files mentioned, the project had some 20-30,000 terms.

Because we did not have any sophisticated computer software to use in manipulating terms, and because it was not a goal of the AAT group, at that point, to design such software, the computer ceased its usefulness. We had each term printed on an A4 size piece of paper called a term sheet and we began the laborious manual process of sorting and arranging the terms.

First, the 20-30,000 terms sheets were sorted into the twenty categories which we had determined broadly represented the field of architecture. For the sake of this project we broadly define architecture as "the built environment." Therefore, we include communications towers, bridges, and breakwaters as well as castles, government buildings, and farm buildings. The twenty categories we established include architectural components, landscape and gardening, settlements and towns, architectural types, materials, equipment, construction, preservation, and others. After the term sheets were sorted into categories, the term sheets for each category were alphabatized to bring like terms together. For instance, each list we used -- RIBA, RILA, etc. -- contained the common terms such as windows, monuments, churches, arches, etc. and these had to be brought together.

The truly interesting, and intellectual part of the work, was arranging the thousands of terms into logical hierarchies. This work required the editor to group the terms in a way that showed the relationship of one term to another. Essentially, there are two types of relationship -- genius/species and whole/part. In a

genius/species relationship a term such as maps would be followed by specific types of maps, e.g.

Maps
- Braille maps
- Digital maps
- Photo maps

The second type of relationship is the whole/part relationship. In this case the term arch would be followed by the parts of an arch, such as:

Arch
- Abutments
- Archivolts
- Keystones
- Voussoirs
- etc.

In some areas of the hierarchy the terms are co-equal. In such cases we use an alphabetic arrangement.

We removed processes from products, that is bricklaying from walls and sidewalks, elements from buildings so that kitchens becomes a separate unit rather than falling under each type of building that may contain a kitchen. In the process we collapsed or merged three categories but created two new categories.

We made a number of discoveries while creating the hierar-

chies. Among the thousands of terms we had, we found ten types of windows but only two types of doors, or all the parts of a column were given but none of domes. As long as a list remains alphabeticly arranged this will always be the case. Although the rules of syndetic structure with broader and narrower term references are designed to partially address this problem, such rules, in fact, cannot keep up with the growth of a vocabulary. The Library of Congress' subject headings are a perfect example of this breakdown occurring. There is a pressing need for new terminology, yet it must be fit into an alphabetical list with full cross-references to broader, narrower and related terms. These relationships are nearly impossible to track through the existing lists. In a hierarchically arranged vocabulary these broader and narrower term relationships are clearly displayed in one place, grouped around the term in question. In addition, the AAT will have an authority record for each term or phrase giving the source of the term, the term relationships that affect it, a scope note, as well as other information.

To solve the problem of the missing terms referred to above we devised a process we call "infill". The editors combed through dictionaries, encyclopedias, text books, and other sources to fill in the gaps. One faces the problem, however, of creating terms which may have little or no literary or use warrant. We have several rules to solve this problem. One rule is to require "infill" in whole-part situations. For instance, in order to deal with civil engineering we have had to create a skeletal hierarchy containing all forms of engineering. We are not, however, requiring completeness in genius/species relation-

ships and therefore will not give 18 types of spoons! The rule in such cases will be to establish the hierarchy in a way that allows individual users to list as many types of an object as is necessary for their work.

The issue of subdivisions puzzled us for some time. We recognized there were certain terms which served a dual role - either as the subject of a work or a modifier to a subject. For example, a work may be about the art nouveau style or it may discuss or show an art nouveau graphic design. Another example, a book may be a dictionary or be about dictionaries. Styles and periods, document types, are dual purpose categories. .The thought of creating both a hierarchy and a separate subdivision list seemed excessive. We finally took the approach of creating one hierarchic list for both of these areas and having it serve two purposes. Recent thinking causes us to consider adding building and art materials to this group of dual purpose categories also. This uncoventional approach has received wide comment and will be tested, along with other aspects of the AAT late this Fall.

The entire Art and Architecture Thesaurus requires extensive rules of usage. It is that rule-structuring process, which occurred over the past several months, that has codified the AAT into an indexing system. This process, lead by Dr. Elaine Svenonius of UCLA, has increased our awareness of the complexity and precision required to build a thesaurus.

The implications of this project reach to several levels. First, despite being funded by the Getty Trust, the AAT is not being designed for them. It is being designed for the art and architecture communities as a whole. This fact has placed a heavy burden of responsibility on us to communicate with scholars, librarians, curators and others to inform them of exactly what we are doing. Furthermore, it is also necessary for us to solicit advice from these groups and individuals to assure that their particular needs are being met.

As a result of this work for the art and architecture communities there will exist the possibility of using a single uniform vocabulary to access both bibliographic material and objects. If done well, scholars in these fields will have unprecedented opportunities to share information and resources. It is a challenge that will require compromise from every constituency with the result a benefit to all.

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Information Technology & Visual Images:

Some Trends & Developments

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GRAPHIC INFORMATION SYSTEMS

Information technology has until quite recently tended to favor alphanumerics as the medium of communication. This emphasis on text militated against those application areas in which the visual image was a crucial factor. Recently, technical developments in two related fields have created a fresh potential for incorporating the visual image into large scale information systems, namely linking computer data bases with optical video discs. As a consequence, design, architecture, and both the fine and the graphic arts have become state-of-the-art application topics in the area of large-scale data storage and retrieval technology. This paper reports on two case studies one based in modern architecture and one based on the work of a particular artist.

ARCHFILE: AN INTERACTIVE ARCHITECTURAL DATA BASE

The hardware installation for both systems is a Perkin -Elmer 3230 Mega-mini computer driving a Discovision optical video disc unit. A touch-sensitive display completes the installation. [Fig. 1]

The video images are displayed on a Panasonic monitor [Figs. 3,4]. An interactive color graphic display is activated by a touch-sensitive screen [Fig.5].

The architectural data base of the project is comprised of approximately 5,500 building records. Each record in the file is divided into 9 fields in the following manner. Fields 1 and 2 define the location of the building. Field 3 defines the building type of which there are eight types. Field 5 gives the date of construction. Field 6 lists the title of the building in question. Field 7 describes the view presented of the building (for example, interior, exterior or detail). Field 8 gives the index of the building in the architectural archive and finally, field 9 holds the five digit code, which is transmitted by the computer to the Discovision Unit to locate and display the relevant frame on the optical disc.

The user accessing the architectural data base may opt to view the records in the data base selected by building type [Fig.7], by designer [Fig.8], by location, by period or by one or more combinations of these parameters.

The principal building types offered by the data base include the following examples:

1. Religious, Funerary
2. Residential
3. Medical
4. Public, Amusement & Recreation, Museums
5. Governmental & Military
6. Educational: Schools & Libraries
7. Communication & Transportation
8. Commercial & Industrial

The search procedure locates and presents successively, the records specified by the search command, for example "Schools by Gropius after 1950". As each example of the reference requested is found and displayed on the graphics monitor, the corresponding visual images are projected on the video monitor of the workstation [Figs. 3,4].

PICASSOFILE

PICASSOFILE is the name given to an interactive graphic information system focused on the work of a single artist, namely Pablo Picasso. Over eight hundred images with associated text provide a comprehensive account of the painter's 'oeuvre'.

For the system, a data record was chosen which consisted of some 13 fields (excluding the name of the artist and other extraneous factors). These fields are respectively:

1. Title
2. Date
3. Location
4. Accession no.
5. Video disc frame no.
6. Material of the given art work
7. Period or style
8. Subject of the particular art work
9. Related art works (to the work in question)
10. Master works

11. Series (sequences of works on a common theme)

12. Remarks (explanatory remarks or comments on a given work)

13. Background (contextual information on a given work)

'Material' refers to the physical identity of the work and has two fields, one naming the type of artwork, (painting, sculpture, collage, etc), the second specifying its medium (oil on canvas, bronze, pastel on paper, etc). The two fields, 'period' or 'style' (7) and 'subject' (8), are each subdivided into three additional fields, which allows one to deal with works that straddle several periods or styles, and to specify up to three of the subjects or themes of any one work. Related works (9), three fields of four subfields each, allow one to note and identify completely (title, date, location) up to three works related to the main work whose data file this record happens to be 'Masterworks' are works that are important either in Picasso's oeuvre and/or in the history of modern art, 'Series' refer to Picasso's variations on some other artist's image, Delacroix's Women of Algiers, for instance. It provides for the identification of a slide as belonging to a series as well as for giving the whole series a common title. 'Remarks' leaves room for any comments that may be necessary. 'Background' consists of some 60 images, (each identified only by artist and title) of works that influenced Picasso in his early career.

Altogether, each record can hold 32 distinct fields of information about each slide. The program that creates the data base, allows one to skip any irrelevant field and most records do in fact hold fewer than the possible maximum number of fields.

Any one of the Picasso images [Fig.9] on the disc can be accessed, the information about it printed out on the monitor, and the image itself shown, through any one of the fields, each of which is unique. Thus, slides can be accessed through their subject, the museum, the city, or even the country where the work is located; the style or the period of the work, or even through the name of an artist who influenced Picasso.

WORK IN PROGRESS

Both the architectural query system (ARCHFILE) and PICASSOFILE are under active development. The main thrust of these developments are directed towards a more versatile query system and a faster response time to search commands.

The PICASSOFILE is being developed further, not only to offer the user the complete range of fields to access, but also to give him some control over the direction or order in which he sees the images (i.e. forward, reverse), and possibly also in choosing, or not choosing, to print out verbal information about the images. This may involve several menu pages, where the user is offered a very general series of choices on the first page, which are then narrowed down in the succeeding pages, to finally become as specific as a title. Anywhere along this process the user could, of course, request to see an image or images.

The whole project can be made purely graphic by having the touch sensitive control 'buttons' on the pages identified not verbally, but pictorially, with graphic symbols, icons, or logos, or even with portions of superimposed digitized images which would form a kind of visual maze or jigsaw puzzle through which the user would uncover a path, or select a way, by touching specified areas on the touch sensitive display. The problem here, however, would be one of legibility of making sure that the images used for identification make their meaning unambiguously clear. A further extension of the project will be to record Picasso images on a write-once disc, couple this disc with the master disc, enter the data of these images on the data base, and then have the searching program search through this data and show these

images along with other images from the Master disc. The point here is to demonstrate the extensibility of the videodisc as a storage medium. For the user, the exact source of the image (master disc or 'write-once' disc is unimportant and this coupling should make it possible for the videodisc to be updated with the information stored on the write-once disc and both shown as an integrated display. The use of the touch-sensitive display is but one method of searching the database and playing the disc. Another method, for instance, would be simply to use keyboard entries to interrogate the database and play the disc. The specific method chosen depends on the purpose for which and the context within which the disc is used. For what may be called a public use, the touch sensitive display is certainly the better method, both to interest the public and to protect the equipment. For what can be called a professional use, keyboard interrogation may be preferred for the open-endedness and the freedom of questioning it allows the user.

In a public setting, such as an exhibition, a spectator could select what he wants to see and guide the database search by activating symbols [Fig.2] on a sequence of menu pages, all on a touch sensitive screen. This would be simpler and more interesting, while it would also be safer for the gallery, since all the equipment, except for the screen, could be located remotely.

A museum curator, however, may wish to use or may have to use the videodisc in a different way. He may wish to interrogate the database directly or he may want to ask quite specific questions of it - paintings dealing with Picasso's theme of the minotaure located in a specific city or museum, for example. Using the keyboard for this would probably be more efficient than with a touch sensitive screen.

On the ARCHFILE system, work in progress is aimed at enhancing the user interface. To this end, a voice recognition and voice synthesis input/output has been implemented. Experiments have been carried out with a large back-projection screen on which to present the images. As with the PICASSOFILE, a "write-once" laser video disc player [Fig. 2] is being used as an auxiliary facility on which to record additional images.

Finally, it may be said that the linking of the video disc with the computer-based information system has created a new type of graphic information system which will be used for a variety of applications in design, architecture and the graphic arts and for a variety of purposes by the student, by the professional, and perhaps most significantly by the lay person exploring an art collection, visiting a museum or "browsing" in an electronic art library.

Fig. 1

Computer controlled Discovision laser video disc unit

Fig. 2

Panasonic "write once" laser video disc unit

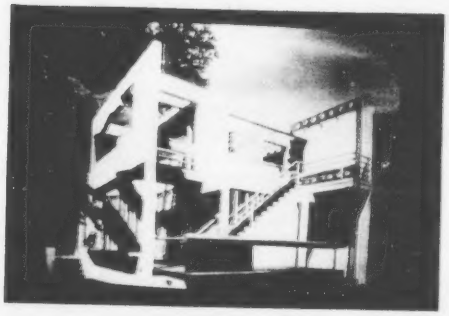

Fig. 3

Architectural image displayed on video monitor

Fig. 4

ARCHFILE work station with video and computer graphic displays

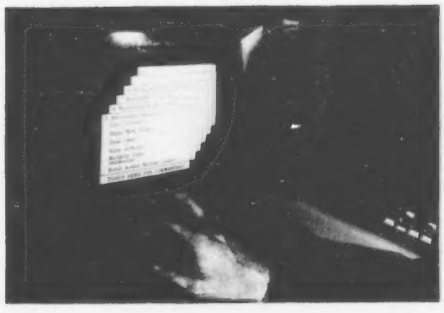

Fig. 5

Touch-sensitive interactive raphic display screen.

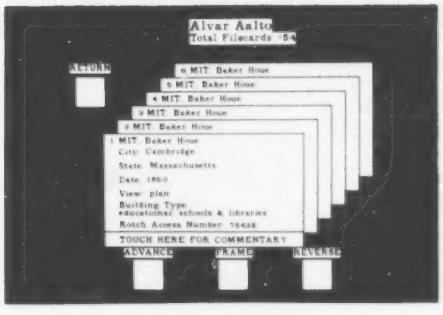

Fig. 6

References corresponding to he images displayed.

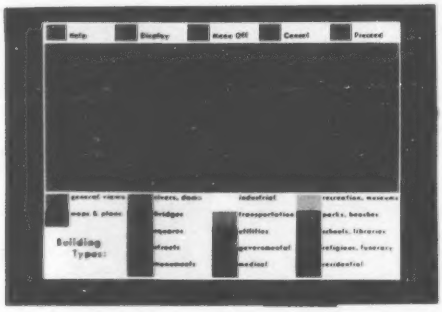

Fig. 7

Index of building types

presented to the user.

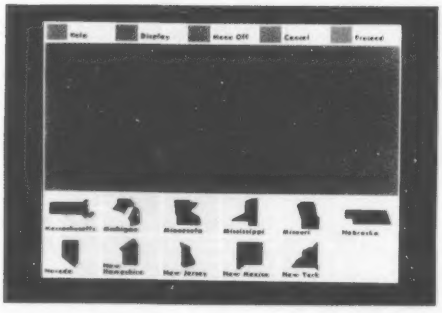

Fig. 8

Symbols of states presented

to the user on the graphic display

Fig 9

Image generated by PICASSOFILE

on the video monitor.

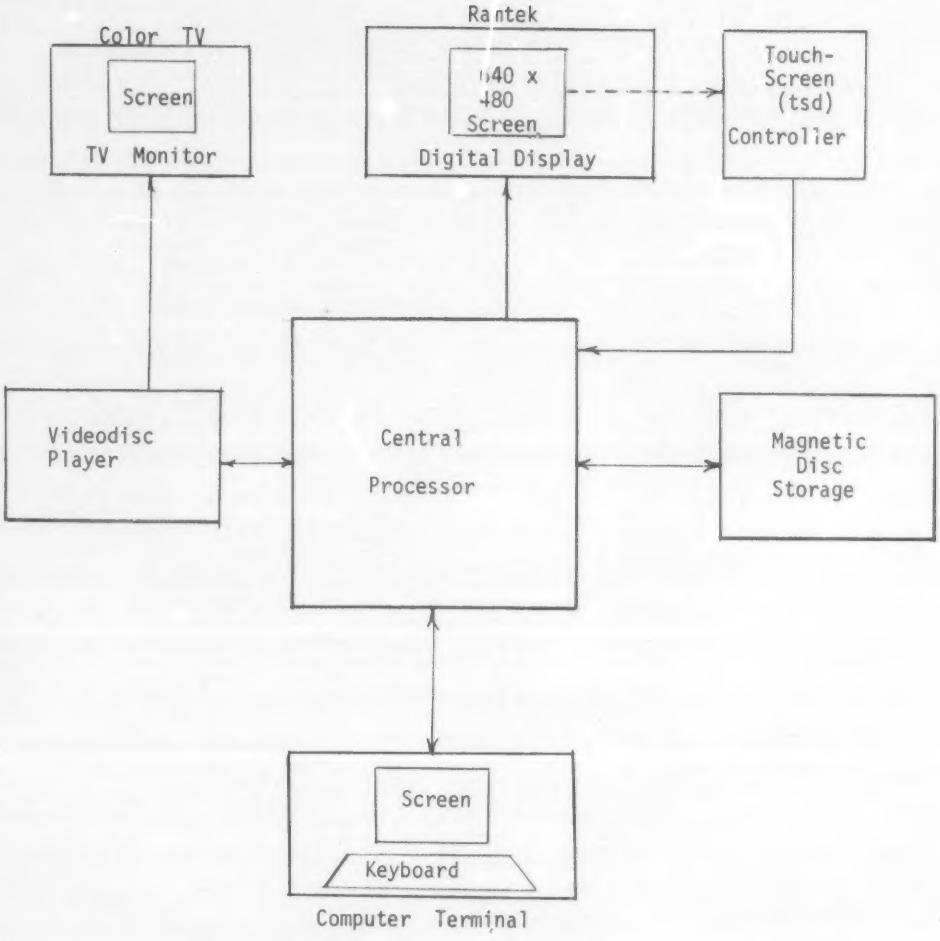

Figure 10. Major System Hardware Components

ACKNOWLEDGEMENT

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REFERENCES

1. Miller, M. "ARCHFILE: A SYSTEM FOR SLIDE RETRIEVAL". MIT Architecture Machine: Internal Paper. 1983.
2. Okun, Henry. "PICASSOFILE". MIT Architecture Machine Group: Internal Paper. 1983.
3. Paternoster, Paul. "The ARCHFILE PROJECT". MIT Architecture Machine Group: Internal Paper. 1983.
4. Pfaelzer, Carter. "An Interactive Keyboardless Access and Display System for a Database with both Videodisc and Magnetic Disc Storage". MIT Architecture Machine Group: Internal Paper.
5. Purcell, P.A. "Information Systems: The Visual Dimension". Proceedings: EEC ---Conference, "The Information Society", Dublin, Ireland. 1980.
6. Purcell, P.A. "Information Systems for Design, Architecture and the Graphic Arts". Proceedings: National Computer Graphic Association Conference, Anaheim, CA. 1982.

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Division: Special Libraries
Section: Art Libraries

66 - SEM - ART - 9 - E

The development, management and preservation of art and architectural microform collections

by

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Current educational changes and their effects on libraries are forcing us to ask, to how many people is this useful, and at what cost? Therefore, delivery of cost effective information transfer systems for teaching and research is the economic priority of the decade for art librarians.

Outstanding economical characteristics of microforms, qualifying them as cost effective, are: 1) Compact Storage and Lower Operational Costs, because of miniaturization microforms have the highest storage density of any media.[1] They save more than 90% of the shelf space occupied by the same publication in paper form. 2) Lower Production Costs, because of the costs of composition, printing, paper and binding there is a nominal difference between the cost of paper publications and micropublications. 3) Reproductibility and Convertibility, beginning with the founding of the modern micropublishing industry in 1938 with the establishment of XUM[2] the evolution of printed document reproduction has gone from paper to film to paper; from paper to film to film; and then from film to film. Present capabilities of going from film to other paper formats such as color slides or videodisc enables microforms to be used literally as hard copy thus providing a built in preservation factor.

The long term approach to achieving useful interface between microforms and information transfer in libraries involves the interdependence of collection development, management and preservation.[3] Awareness of the interrelationship of these three components will insure effective microform programming in the art and architectural library.

COLLECTION DEVELOPMENT

Traditionally, microforms in libraries have provided a solution to the problem of storing specialized materials thus resulting in a limited application of the medium. Consideration of microforms for their own merit, as a communication and preservation medium affords wider use.

The establishment of a microform collection entails the selection of visual and textual sets and the technology appropriate for their viewing, projecting and copying. The following is an annotated list of visual and textual microfiche sets from North American and Westren European collections. Visual sets include the photographic reproductions of archives of drawings, plans, architecture, painting, sculpture, decorative arts, fashion design and photography, both in black and white and in color. Textual sets include photographic reproductions of printed card catalogs, art criticism, biographies, architectural writings, sales, salon and exhibition catalogues, in black and white only.

The following is an annotated list of microfiche sets from North American and Western European archives and museums. The bibliographic details in this list include: titles, publishers, prices, number of fiches and images as well as a description of their contents. (See Appendix for full listing).

- Ancient Roman Architecture
- Architecture and Monuments in France
- The Architecture of Washington, D.C.
- Historic Buildings in Britain
- British Oil Paintings, 1400-1900

- Catalogs of the Library of the Central Institute for Art History, Munich
- The County Court Houses of America
- Christie's Pictorial Archive
- Deloynes Collection: Documents of the Fine Arts, 1675-1808
- Early Alinari Photographic Archives
- M.C. Escher Drawings
- Exhibition Catalogues from Chadwyck- Healey
- Fine and Decorative Arts in France
- French Architectural Writings, 16th - 19th Century
- The Historic American Buildings Survey
- The House of Worth, Fashion Designs: A Photographic Record, 1894-1927
- Index Iconologicus
- Index Photographique De L"Art en France
- Knoedler Library on Microfiche
- Leonardo Da Vinci's Drawings
- Marburger Index
- Gustave Moreau Drawings
- Nigerian Bronzes
- Paris Views and Early Photography in France
- Photographic Views of New York City, 1870's - 1970's
- University of Chicago Visual Library
- The Victoria and Albert Museum Collection
- The Victoria and Albert Museum Collections of Miniatures
- The Victoria and Albert Museum Watercolours
- The Wallace Collection

Selection of these specific archives was determined by their reproduction on microfiche, instead of on microfilm. Microfiche have substantial advantages over microfilm. They can be quickly scanned and duplicated; an area of each microfiche is reserved for eye-legible bibliographic information. Exclusive use of microfiche hardware and software over that of microfilm is further promoted because microfiche readers, printers and projectors are less expensive and more versatile and reliable than their roll microfilm counterparts. Microfiche viewing equipment can be used both for calssroom projection and for individual research. Two units possessing such dual functions as a microfiche reader and projector are: 1) Bell and Howell's ABR VIII which features a full 360 degree optical image rotation allowing images to be viewed either vertically or horizontally, and, 2) Bell and Howell's Commuter portable model which features a floating lense and rechargeable battery. The recommended reader-printer is 3M's 800 Microfiche Reader Printer.

COLLECTION MANAGEMENT

The success or failure of microform utilization in libraries is determined by the response of the user. Therefore, any microform collection design must have at it's constant focus the user's needs and reactions.[4]

The key variables of microform collection development, management and preservation realtive to user acceptance are: 1) Bibliographic Control, 2) Administration, and, 3) Circulation.

BIBLIOGRAPHIC CONTROL

A significant and unresolved problem in the utilization of microform collections is that of bibliographic control. If microforms are to realize extensive or routine use, effective bibliographic controls are a necessity.[5]

Encompassing the three levels of bibliographic control of microforms are: 1) National and International, which include trade bibliographies and library catalogs providing information about the existence of a microform collection or set, 2) Local Bibliographic Controls including card catalog entries and printed guides providing information about availability, nature and location of a microform, and 3) Internal Documentation which includes microfiche heading areas which are part of the microform itslef and serve as an identifier when removed from storage.

Inadequate local bibliographic controls remains a major impediment to rapid access of microforms in art and architectural libraries. A standard problem posed by the microfiche format is that of cataloging. A full catalog record for individual sets should be supplied in the card catalog which contains an identifying code, substituting for a call number, that refers patrons to the separate microform collection within the library.

A recent ARL Microform Project initiated an investigation of bibliographic control of microforms in major research libraries.[6] Findings indicated that a National Microform Agency should be formed, an organization whose principal mission is promotion of high technical and bibliographic standards in micropublication. It is to this end that the following two projects are mentioned:

- The Association of Research Libraries Microform Project is established to assist libraries in the U.S. and Canada, microform publishers, bibliographic utilities, and the Library of Congress in improving bibliographic

access to titles in microform sets. The project goals emphasize building on existing resources and fostering cooperation among the institutions within the library and publishing communities and the bibliographic utilities to see that cataloging is done as economically as possible.

• The Art Libraries Society of North America Microforms Committee Union Catalog Project is established to survey the major art and architectural microfiche collections in North America for production of a union catalog. Publication of this descriptive catalog represents an advancement in the cooperative use of outstanding fine arts and architectural collections nationwide. Grant funding has been obtained for the project entitled, "Microform Collections Survey in Fine Arts Research Libraries," and procedures include surveying the microfiche collections in four institutions to obtain a description of their holdings: 1) The National Gallery of Art in Washington, D.C., 2) New York University, Institute of Fine Arts in New York City, 3) University of California at Santa Barbara, and, 4) University of Texas at Austin. The union catalog is scheduled for publication in the December 1983 issue of the Bulletin of the Art Libraries Society of North America, Art Documentation. Paula Chiarmonte is project director and chaired the Microforms Committee whose earlier objective was formulation of microform collection development policies.

ADMINISTRATION

The responsibility for the administration of the microform area should be with a staff member who is a specialist, one who has a strong interest and background in the format and equipment. Personnel priorities should include both a professional librarian as the microform manager and a non-

professional assistant as the reading room attendant. At least one well trained assistant should be in the facility during all of the hours it is opened, to provide reference service for the materials and instruction in the use of the equipment.[7]

CIRCULATION

Traditionally, microforms have not been circulated because of their fragile nature and the lack of availability of portable reading machines. Although there are benefits to be gained from the lending of microforms, mainly in increased acceptance of the medium and appreciation of extended library service, for security and economy purposes the microdocument should not leave the library. If a non-circulating policy is effected the microforms collection is not subject to the common problems of theft and mutilation faced with paper print. If stolen, the replacement cost is relatively low because micropublishers generally protect security of the original by: 1) registering a copy with the Library of Congress, 2) they keep a master of their own, and 3) they usually take another copy and file it in a security vault under controlled conditions.[8]

COLLECTION PRESERVATION

In it's proper context conservation of microform collections should be considered in relation to their development and management.[9] Preservation activities for microforms include: Environmental Control, Centralization, and, Storage and Handling Techniques.

The use of microforms requires the same environmental conditions, with the exception of lighting, as are found in any well designed library area. (General lighting should be of low intensity and adjustable, through a dimming device). The area must be air conditioned and have proper air filtration, humidity level and temperature control must range above 65 F. for the comfort of the user and below 80 F. for preservation of the microforms. The temperature should be as close to 70 F. as possible. Recommended humidity levels are between 30 and 50 percent.

Ideally, microforms should be located in the same facility as the hard copy of a particular discipline. Although it is more efficient to centralize microforms in one location, both the librarians and the users resistance to microforms increases when they are separated from their subject collection because of form.[10] Microform sets should be housed in metal storage units and individual fiche envelopes should be acid-free. Regular dusting of microform cabinets is essential as is consistent maintenance and cleaning of hardware.

Despite a current lull in the publishing industry, microform publication is at an all-time high. Reichmann and Tharpe indicated ten years ago that: "The microform industry estimated that production would increase by ten percent annually."[11] The current figure is twenty percent yearly. The growth of the micrographics industry in general, and micropublishing in particular, is reflected in an increased interest in microforms by libraries of all types. The latest edition of the Microform Market Place lists about 900 micropublishers.[12] The reason for this growth in the

micropublishing industry is the many advantages that microforms possess as legitimate library media. The generally accepted advantages, several of which can serve as criteria in selecting a microform source, and that were mentioned earlier are: 1) Compact Storage and Lower Operational Costs, 2) Lower Production Costs, and 3) Reproducibility and Convertibility.

Guided by these advantages the response of the general library world to microforms has been one of acceptance, although, adoption of microforms by art and architectural librarians has been less than enthusiastic. This response is due to the fluctuating standards in the art micropublishing industry and to unstable microfilm color dyes. Refinement of these technical problems has occurred within the past year, however, because of standards generated from the profession. Assurance of a successful microform collection development program, therefore, depends upon the use of new technologies by art micropublishers as well as as awareness fostered by art librarians regarding the interdependence of microform collection development, management and preservation.

FOOTNOTES

[1]Gillespie, John T. and Spirt, Diana L. Creating a School Media Program. N.Y.: R.R. Bowker, 1973. p.207.

[2]Xerox University Microfilms in Ann Arbor, Michigan.

[3]Hawker, W.P. "Systems Instead of Standards," Library Journal 98 (September 1973): p.2515.

[4]Holmes, Donald C. Determination of User Needs and Future Requirements for a Systems Approach to Microform Technology. Wash.,D.C.: Association of Research Libraries, 1969.

[5]Reichmann, Felix and Tharpe, Josephine. Bibliographic Control of Microforms. Westport, Conn.,: Greenwood Press, 1972. p.203.

[6]Bahr, Alice H. Microforms: The Librarians'View, 1978-1979. White Plains, N.Y.: Knowledge Industries Publications, 1978. p.85.

[7]Fair, Judy, ed. Microforms and Management in Special Libraries: A Reader. Weston, Conn.: Microform Review, 1979. p.41.

[8]Folcarelli, Ralph J. and Ralph C. Ferragamo. "Microform Publications: Hardware and Suppliers," Library Trends Vol.24 No.4 (April 1976): p.13.

[9]Hazen, Dan C. "Collection Development, Collection Management and Preservation," Library Resources and Technical Services. Vol.24 No.2 (April 1982): 3-11.

[10]Salmon, Stephan R. "User Resistance to Microforms in the Research Library," Microform Review 3 (July 1974): p.195.

[11]Reichmann, Felix and Josephine Tharpe. Bibliographic Control of Microforms. Westprot, Conn.: Greenwood Press, 1972. p.203.

[12]O'Hara, Deborah Ann, ed. Microform Market Place 1982-83. Westport, Conn.; Meckler Publishing, 1982.

BIBLIOGRAPHY

Campbell, B.W. "A Successful Microfiche Program," Special Libraries 62 (March 1971): 136-42.

Diaz, Albert James, ed. Microforms and Library Catalogues: A Reader. Weston, Conn.: Microform Review, 1977.

Dodson, Suzanne Cates. "Toward Bibliographic Control: The Development of a Guide to Microform Research Collections," Microform Review 8 No.4 (April 1974): 210-18.

Gregory, Roma S. "Acquisitions of Microforms," Library Trends 18 (1970): 373-84.

Jebb, Marcia. "Bibliographic Control of Microforms," Drexel Library Quarterly 11 No.4 (1975): 3-8.

Kent, Allen et al, eds. "Microform Publication," Encyclopedia of Library and Information Science. N.Y.: Dekker, 1976. XVII, 99-114.

Landau, Robert M. "Microfiche Human Factors," Journal of Micrographics 10 No.5 (May-June 1977): 219-227.

Levin, Howard M. and Wendy Strothman. "Pictorial Microfiche," Journal of Micrographics 10 (March 1977): 153-8.

Otten, Klaus W. "A Hypothesis: Microforms Will Become the Major Medium for 'New Information' in Reference Libraries," Journal of Micrographics 4 (1971): 266-76.

Robbins, Eugenia S. "microfiche- A Visual Explosion in Mini-Dimensions," Art Journal 37 (Fall 1977): 1-5.

Saffady, William. Micrographics. Littleton, Col.: Libraries Unlimited, 1978.

Sandstrom, Sven. "Microfiche Systems- Our Future Main Reference Resource for Art Works?" AICARC Bulletin 10 (1979): 8-11.

Sisson, Jacqueline. "The Role of Microforms in Collection Development," ARLIS/NA Newsletter 8 No.1 (December 1979): 1-5.

Teague, S.J. Microform Librarianship. Woburn, Mass.: Butterworth, 1977.

Veaner, Allen B.,ed. Studies in Micropublishing: A Reader. Weston, Conn.: Microform Review, 1977.

Walsh, Patricia, ed. "Visual Arts Issue," Microform Review 8 No.3 (Summer 1979): 1-237.

Williams, B.J.S. "Microforms in Information Retrieval and Communication Systems," ASLIB Proceedings 19 (1967): 223-231.

ANCIENT ROMAN ARCHITECTURE

- Published by Saur, Volume 1: 14,000 images on 141 b&w fiche. Volume 2: 12,000 images on b&w fiche, $895 per volume.

  - One of the most important photo archives on Roman art and architecture in the world. The archives were founded in 1956 with a collection of photographs and negatives gathered and executed by Ernst Nash. Both volumes are divided into three sections, each numbered and indexed separately: 1) Empire, 2) Pompeii, 3) Italy.

ARCHITECTURE AND MONUMENTS IN FRANCE

- Published by Mindata, 17,000 images on b&w fiche, with index. $540.

  - Photographed by Felix Martin-Sabon and reproduced in its entirety, this collection records buildings and monuments throughout France, complete with interior views and many details.

THE ARCHITECTURE OF WASHINGTON, D.C.

- Volume 1: Edited by Bates Lowrey, published by the Dunlap Society, 1554 images on 40 b&w fiche, with printed text. $105.

  - Includes the White House, Octagon, Treasury Building, General Post Office, Washington Monument, State War and Navy Building, Union Station, Lincoln Memorial, and the Supreme Court.

  Volume 2: Edited by Bates Lowrey, published by the Dunlap Society, 1995 images on 48 b&w fiche, with printed text, $105.

  - Features the Capitol, Patent Office, Smithsonian Castle, Library of Congress, Pan American Union Building, Federal Triangle, and the Jefferson Memorial.

THE DRAWINGS OF GUSTAVE MOREAU

- Edited by Jean Paladilhe, published by Chadwyck-Healey, 4830 images on 55 b&w fiche, including biography and bibliography, $250.

  - This collection is filmed in the order in which they are arranged in the Gustave Moreau Museum in Paris, which contains Moreau's paintings and drawings.

CHICAGO VISUAL LIBRARY

- Published by the University of Chicago Press

  - Each text-fiche title contains hundreds of articles reproduced in full color or black and white on microfiche with an accompanying book of commentary and catalog information. The following is a complete list of available Chicago Visual Library titles.

1. Oriental Institute, The 1905-1907 Breasted Expedition to Egypt and the Sudan. Vol. 1 $25.00; Vol. 2 $30.00.
2. Oriental Institute, Persepolis and Ancient Iran. $50.00.
3. Allen, Victorian Bookbindings. $25.00.
4. White, Pottery Techniques of Native North America. $32.50.
5. Cheney Cowles Memorial Museum, Cornhusk Bags of the Plateau Indians. $30.00.
6. Dumbarton Oaks Collections, Pre-Columbian Art. $22.50.
7. Phillips Collection, A Collection in the Making. $45.00.
8. International Museum of Photography at George Eastman House, British Masters of the Albumen Print. $30.00.
9. Baltimore Museum of Art, American Prints, 1879-1950. $15.00.
10. National Collection of Fine Arts, Smithsonian Institution, American Art in the Barbizon Mood. $22.50.
11. Commonwealth Institute, The Arts of the Hausa. $25.00.
12. Isabella Stewart Gardner Museum, A Selection of Paintings, Drawings, and Watercolors. $25.00.
13. Whitney Museum of American Art, Selections from the Permanent Collection. $25.00.
14. Art Institute of Chicago, French Drawings of the Sixteenth and Seventeenth Centuries. $23.50.
15. The Art Institute of Chicago, French Drawings and Sketchbooks of the Eighteenth Century. $50.00.
16. Oriental Institute, The 1919-1920 Breasted Expedition to the Near East. $14.00.
17. Corning Museum of Glass, A Survey of Glass-making from Ancient Egypt to the Present. $28.50.

18. National Collection of Fine Arts, Smithsonian Institution Academy. $29.50

19. International Museum of Photography at George Eastman House, Lewis Wickes Hine's Interpretive Photography. $45.00.

20. Library of Congress, Charles Fenderich. $25.00.

21. Philip Troutman Courtault Institute of Art, The Paintings. $75.00.

22. The Art Institute of Chicago, French Drawings and Sketchbooks of the Nineteenth Century, Vol. 1. $75.00.

23. The Art Institute of Chicago, French Drawings and Sketchbooks of the Nineteenth Century, Vol. 2. $100.00.

24. Dumbarton Oaks Collection, Byzantine Art. $29.00.

25. Nationalmuseum, Stockholm, Drawings of Johan Tobias Sergel. $40.00.

26. Smithsonian Institution, The Thomas Eakins Collection of the Hirshhorn Museum and Sculpture Garden. $32.50.

27. Czestochowski, The Works of Arthur B. Davies. $75.00.

28. The Art Institute of Chicago, Italian Drawings of the 15th, 16th and 17th Centuries. $80.00.

29. The Art Institute of Chicago, Italian Drawings of the 18th and 19th Centuries and Spanish Drawings of the 17th through 19th Centuries. $40.00.

30. Christian, The Oxford Union Murals. $24.00.

31. Rubenstein, Max Weber. $38.50.

32. The Art Institute of Chicago, Twentieth Century European Paintings. $60.00.

33. The Oriental Institute Ptolemais Cyrenaica. $45.00.

34. The Pierpont Morgan Library, Masterpieces of Medieval Painting. $195.00.

35. Farwell, French Popular Lithographic Imagery, 1815-1870, Vol. 1. $55.00.

36. Chicago Historical Society/Darling, Decorative and Architectural Arts in Chicago, 1871-1933. $60.00.

37. Farwell, French Popular Lithographic Imagery, 1815-1870, Vol. 2. $55.00.

38. Gavin, The Image of the East. $65.00.

HISTORICAL BUILDINGS IN BRITAIN

- Published by Chadwyck-Healey, 664 b&w fiche with glossary and index, $1833.

  - Contains seventy published volumes of the Royal Commissions on Historical Monuments in England, Scotland and Wales. 20,877 pages of description of every notable building and monument, built before 1714 are accompanied by 7500 pages of photographs, line drawings, maps and plans. The general arrangement of the Inventories is an historical introduction, a list of buildings recommended for preservation and the illustrated inventory of the buildings and monuments inspected. The Inventory is arranged in parishes, with each parish subdivided into types of structures.

BRITISH OIL PAINTINGS, 1400-1900

- Published by Ormonde/Clearwater, 2000 images on color fiche, fully indexed, $730.

  - This collection is a comprehensive study of the Victoria and Albert Museum's collection of oil and tempera paintings by British artists and by foreign artists working in Britain. It is particularly rich in paintings from the early 19th Century.

CATALOGS OF THE LIBRARY OF THE CENTRAL INSTITUTE FOR ART HISTORY, MUNICH

- The Library of the Central Institute for Art History (Zentralinstitut fur Kunstgeschichte) in Munich, West Germany is recognized as one of the most important art libraries in Europe. Its holdings currently number over 200,000 volumes and encompass all branches of art history and theory. The particular strengths of the library lie in the fields of aesthetic theory and history, iconography, French art through 1900, and the art and art history of Eastern and Southeastern Europe. Especially outstanding are the library's collection of emblem books and arthitectural writings. The microfiche edition of the library's catalogs will be published in four sections, available individually.

THE ALPHABETICAL MAIN CATALOG, published by Saur, 272,000 cards on 199 fiche, $1345.

- A complete bibliography of the library's book, catalog and periodical holdings - as of 1 January 1982. The museum and exhibition catalogs, as well as the catalogs of private collections, are each listed in their own alphabetical sequence.

CATALOG OF ARTICLES AND ESSAYS, published by Saur, 250,000 card on 180 fiche, $1250.

- Alphabetical listing of all articles and reviews in journals, anthologies and Festschriften published from 1950 on.

SUBJECT CATALOG published by Saur in 1983, 500,000 cards on 270 fiche, $2450.

- This section offers detailed bibliographic information on the books published since 1950 listed in the Main Catalog, as well as the articles and essays appearing since then. This section provides access to the recent literature on art history and aesthetics.

PRINTED GUIDE, published by Saur in 1984.

- Will consist of an introduction to the library, outline of the cataloging system, instructions for the user, and index to the subject catalog.

THE COUNTY COURT HOUSES OF AMERICA

- Volume 1: Published by the Dunlap Society, 3500 images on 79 b&w fiche, with printed text, $275.

  - Drawn from the complete Seagram Court Houses Archives and photographs from the Library of Congress, the program is a record of Alabama through Louisiana.

- Volume 2: Published by the Dunlap Society, 5000 images on 100 b&w fiche, with printed text, $275.

  - Drawn from the above sources and recording Maine through Wisconsin.

CHRISTIE'S PICTORIAL ARCHIVE

- Painting and Graphic Art: Published by Mindata, 30,000 images on b&w fiche, $2160.

  - Reproductions are of items sold by Christie's over a period of more than 70 years. Over 5,000 artists are represented. The material is published by school, with the work filmed in alphabetical order by artist. A separate printed index lists all artists which are keyed to a numerical fiche reference.

- Decorative and Applied Art: Published by Mindata, 40,000 images on b&w fiche, $3073.

  - Reproductions are of items sold by Christie's over a period of more than 70 years. There are over 40,000 illustrations grouped in categories according to Christie's own Departmental arrangements with objects in chronological sequence by country.

DELOYNES COLLECTION: DOCUMENTS OF THE FINE ARTS, 1675-1808

- Published by the Bibliotheque Nationale, 43,000 pages on 516 b&w fiche, $1100.

  - Contents include:

    Diderot's essays in art criticism
    Competitions, prizes, juries (1790-1804)
    Exhibitions at the Palais du Luxembourg (1688-1808)
    Biographies of Painters
    Exhibition of Industrial Art (1806)

EARLY ALINARI PHOTOGRAPHIC ARCHIVES

- Published by Mindata, 7000 images on 122 b&w fiche, with printed index, $530.

  - The early part of the Alinari archive, dating from the 19th century, represents only one section of the entire collection of 200,000 photographs begun in 1854 to create a photographic record of Italian art and architecture. Arrangement is alphabetically ordered by town, with major parts on Rome and Florence.

M.C. ESCHER DRAWINGS

- Published by Inter Documentation Company, 2100 images on b&w fiche, with printed guide and index, $500.

  - A microfiche edition of the complete collection of 2100 original Escher drawings arranged and cataloged by the Municipal Museum of the Hague. These drawings provide the basis for his graphic works.

EXHIBITION CATALOGUES FROM CHADWYCK-HEALEY

- Published by Chadwyck-Healey, complete collection of 3100 titles on 4700 b&w fiche, with COM subject index, $14,020.

  - A major program established in 1974, in cooperation with worldwide museums and galleries, to make out of print exhibition catalogues available on microfiche. To date, over 3100 catalogues have been reproduced, which can be purchased in the pgorams entirety, individually, by subject or museum.

FINE AND DECORATIVE ARTS IN FRANCE

- Published by Clearwater, 33,000 images on color fiche, with indexes, $2190.

  - This project records all principal works of art in French collections - public and private - as well as major works from foreign sources exhibited in France. Its coverage is extensive: illustrating over 70,000 items from 300 museums and galleries. Paintings, drawings, sculpture and the decorative arts have been filmed separately, although the collections of major national museums have been grouped together.

FRENCH ARCHITECTURAL WRITINGS, 16th-19th CENTURY

- Published by Microeditions Hachette, edited by Claude Mignot, 105 titles on 614 b&w fiche, $2025.

  - A collection of rare books and research materials in French with titles including aesthetic discourses, architectural treatises, technical discussions, pamphlets and journals.

THE HISTORIC AMERICAN BUILDINGS SURVEY

- Published by Chadwyck-Healey, 1400 b&w fiche, $4950.

  - Includes all the record photographs and recorded information produced by the Historic American Buildings Survey and transmitted to the Library of Congress, between 1933 and 1979. Over 20,000 U.S. sites and structures are documented in over 45,000 photographs. The written descriptions of the 20,000 buildings in the survey total more than 35,000 pages of text. An outstanding feature of this program is its availability for purchase as an entire set or state by state.

THE HOUSE OF WORTH, FASHION DESIGNS: A PHOTOGRAPHIC RECORD, 1894-1927

- Published by Mindata, 7000 color images, $485.

  - Charles Frederick Worth founded his fashion house in Paris in 1858. The designs from the period of the 1890's to the late 1920's are shown in a strictly functional manner, and include the date and catalogue number.

INDEX ICONOLOGICUS

- Published by Microfilming Corporation of America, 60,000 images on 400 b&w fiche, $1295.

  - The Index spans major periods of art and literature from 1250 through 1940. Images are arranged by proper names, places, words, concepts, objects, and themes. Three sections are included: 1) Preface: presents an overview of the Index with a bibliography, and filing principles explanation as well as cross reference symbols. 2) Primordia: lists important resources in the history of printing. 3) Index Iconologicus.

INDEX PHOTOGRAPHIQUE DE L'ART EN FRANCE

- Published by Saur, 100,000 images on 1000 b&w fiche. $3000.

  - The largest archive on French art outside of France. The collection is published in four parts and includes photos of churches, monuments and public buildings, with exceptionally good coverage of sacred medieval architecture and sculpture.

KNOEDLER LIBRARY ON MICROFICHE

- Since its inception in 1846, Knoedler has built an art reference library concentrating on a catalogue of Sales, Exhibitions, and Salons and Annuals. The University of California at Santa Barbara is indexing the collection to create the world's largest computerized retrieval system of art exhibition catalogues.

SALES CATALOGUES, published by Knoedler, $28,391.

SALONS AND ANNUALS CATALOGUES, published by Knoedler, $6014.

EXHIBITION CATALOGUES, published by Knoedler, $24,223.

LEONARDO DA VINCI'S DRAWINGS

- Published by Ormonde, 455 images on 13 color fiche, $225.

  - From the Royal Collection at Windsor Castle the best nature studies and anatomical drawings have been selected for reproduction on color fiche. An outstanding feature includes drawings produced on film with ultra-violet and infra-red light for higher color intensification and saturation.

THE MARBURGER INDEX

- Published by Saur, 500,000 images on 5000 b&w fiche, $6675.

  - This collection includes architecture, painting, sculpture and the arts and crafts from the Middle Ages to the present from collections owned by the Bildarchiv Foto Marburg and the Rheinisches Bildarchiv in Cologne.

NIGERIAN BRONZES

- Published by Ormonde, in 1983, 300 color images, fully indexed.

  - This collection contains work from Ife, Benin and the Lower Niger area housed in the Museum of Mankind. The earliest pieces - from the Igbo-Ukwu finds - may date from the 9th Century. All periods of Benin work are represented.

PARIS VIEWS AND EARLY PHOTOGRAPHY IN FRANCE

- Published by Mindata, 9000 images on b&w fiche, $960.

  - The first segment is a comprehensive set of photographs from Paris - from the end of the 19th Century to the present. There are almost 2000 photographs of monuments, important buildings and general views. A second set of Paris views includes street scenes and topographical views of France. There is a special section of photographs by the Nadars, comprised of several hundred portraits of 19th Century personalities and fashion photos, along with a selection of over 150 photographs by Alget. These are followed by nearly 2500 photos of architecture and monuments in Spain and Portugal in the early 20th Century taken by Lefevre-Pontalis.

PHOTOGRAPHIC VIEWS OF NEW YORK CITY, 1870's - 1970's

- Published by University Microfilms International, 54,000 images on 1487 fiche, with complete index, $3800.

  - A 100 year visual history of New York City emphasizing Manhattan architecture. An outstanding feature is the three volume index providing street, building and subject access.

THE VICTORIA AND ALBERT MUSEUM COLLECTION

- The Victoria and Albert Museum collection was founded with contemporary works from the Great Exhibition of 1851 and houses a unique art collection dating from the early medieval period to the present, principally from Europe and the Near and Far East. The photographs on microfiche have museum reference numbers and captions, by which any item in the collection can be traced. A photographic reference number is also given, and prints of any item can be ordered directly from the museum.

ARCHITECTURE AND SCULPTURE

- Published by Mindata, 8500 images on b&w fiche, $297.

CERAMICS

- Published by Mindata, 13,000 images on b&w fiche, $457.

FURNITURE AND WOODWORK

- Published by Mindata, 6000 images on b&w fiche, $207.

METALWORK

- Published by Mindata, 7000 images on b&w fiche, $248.

TEXTILES

- Published by Mindata, 9500 images on b&w fiche, $333.

THE VICTORIA AND ALBERT MUSEUM COLLECTIONS OF MINIATURES

- Published by Emmett Microform, 2300 images on color microfiche, with index, $1495.

  - This collection of portrait miniatures, silhouettes and plumbago drawings is one of the most comprehensive in the world and includes some of the best examples of work by English and Continental artists. There is a comprehensive index on fiche that is computer produced by artist and titles, and giving details of size, shape and media.

THE VICTORIA AND ALBERT MUSEUM COLLECTION OF WATERCOLORS

- Published by Ormonde, 6500 images on color fiche, $2250.

  - This collection makes paintings by over 1600 artists - from the 16th to the 20th Century - available for the first time. Most of the paintings are by British artists, however, works of other Continental artists also appear.

THE WALLACE COLLECTION

- Published by Mindata, with printed index, $350.

  - This collection represents the mediums of painting, furniture, ceramics, arms and armour, sculpture and decorative arts from the 16th to the 19th Century in Europe.

IFLA 1983

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On-line databases for architects and designers

by

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For internal use only:
to be brought to meeting no:
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Remarks:
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Having been set a very wide brief the first problem is to define both what and whom we are discussing. The terms 'on-line', 'database','architect' and 'designer' all have very wide connotations. Dictionary definitions are readily available but for the purposes of this paper the following will be meant. When 'on-line' is discussed it should be recognised that searches of on-line databases may be made at a distance by a third party where local terminals and connections are not available. Many referral centres exist[1] and some enquiries from practices in particular are likely to be answered by referral centres for some years to come until the equipment is universally held.

'Database' to librarians usually means a store of bibliographical references, whether related to a particular topic or of a more general nature. To others with whom librarians deal a database is just a store of information or data. Hence librarians have adopted a second term to refer to the latter - databank. Both are of importance and likely to develop side-by side as ARIANE has shown. The videotex systems are mainly databanks but in future videotex may provide access to databases also. Database will not be used here in the computer sense describing any collection of facts or data imput into the computer.

The architect and designer have a very wide range of information needs according to the nature of their work.. The art librarian in a university or college meets mainly the academic, often more interested in theory or history than practice. Those academics who still work in practice may have a more highly developed sense of the information available and its organisation than those who are entirely involved in practice. The librarian in the public or company library is used to the demands of the practising professional with little time, who is impatient of delay while a full search for literature on a topic is located and without time to read it when gathered together. It is their information needs which have been more fully investigated in

recent years [2] showing that databanks are needed for speedy access to basic facts using bibliographical references as a back-up because they may take too long to locate. References to regulations and standards are not helpful without the texts to refer to. Discussions of information need in journals relate mainly to the factual databank and the professional's needs than to the librarian and databases.[3]

The main problems both for the architect and the designer are the shear quantity of information being produced, its quality and applicability to given situations with reference to relevant standards and regulations. The latter, being usually national, tend to create a nationalistic approach to information which the current availability and content of many databases and databanks reinforces. For many the essence is knowing where to look and the intermediary becomes a necessary guide. For others such articles as that in Designer,[4] 'If that's all there is to it, I might go try it tomorrow,' suggest the use of databases is easier than it is, and, while providing a good précis of how on-line searching works, of what it costs and where it can be used, they fail to indicate that the selection of the appropriate database for any query is a virtual minefield for the uninitiated. This is partly because the architect may require anything from ergonomic data relating to specific types of building, to very technical structural details, to data on new materials, to fire protection, energy consumption figures and conservation of stonework. The designer, while requiring similar information such as protective coatings data, may also need graphics, marketing, packaging or engineering data. Data as much as references to literature is essential.

Given the wide scope of such needs which are fully discussed in my own guide Sources of information in architecture,[5] it is not surprising that there are

few databases which can be said to encompass all necessary topics and most databanks are of fringe benefit or internal to particular companies rather than universally available. However a few databases can be said to cover most aspects of architecture and design and the indexing and abstracting journals which are currently prepared by computer give further potential for development. Some may be on-line soon. Others are being curtailed through lack of finance, or this same lack of finance is hindering the automation of their production.

One could therefore list numerous databases as being of interest to the architect and designer simply by analysing their diverse requirements in the light of available databases. The range is enormous. World Textile Abstracts developed by three British research associations will cover the strengths and uses of wall coverings, technical uses of textiles or of coverings for dome structures. TITUS (TITUS-E in English or TITUS-F in French) from the Institut Textile de France covers similar ground complementing the former. HSELINE compiled by the British Health & Safety Executive covers all aspects of health and safety design and legislation of which everyone in the professions should be aware. In particular such a database is up-to-date with changes in regulations such as those in Britain which have resulted from Building Research Establishment investigations of serious fires - that at Woolworths in Manchester caused the alteration of regulations governing foam furniture fillings.

If one scans through the databases offered by a service such as Télésystèmes Questel a large proportion can be seen to be useful. For example,

CNRSLAB describes research units in France who may provide useful contacts on problem areas relating to anything from physics and the chemical behaviour of plastics to law;
EDF-DOC covers electricity and environmental problems;
ESSOR identifies products, services and management of c. 65,000 companies in France giving financial data also which is particularly useful for those in other countries who may not easily be able to obtain French printed trade directories;
EURECAS has bibliographic and 'structural' files covering metals, wood, plastics, leather, textiles, ceramics and pollution among others;
GEODE should cover geological site information for the architect;
IALINE covers agricultural buildings and food packaging;
INPI is a source of patent information for the designer;
INTERCIM gives references on cements, limes and plasters;
LEX is a legal database;
NORIANE contains both lapsed and current standards since 1976;
PASCAL is quite general covering all aspects of engineering, geology, chemistry, polymers, architecture and construction, planning, transport and public works;
TITUS has been mentioned;
URBAMET indexes planning, housing and other environmental topics.

Any indication of contents becomes less than precise when faced with the range of databases and design needs. This paper will attempt therefore to discuss some of the major databases and databanks trying to draw some conclusions on their adequacy and likely future developments.

In England the first database available covering architecture was ACOMPLINE from the Greater London Council Research Library based on their Urban Abstracts, formerly Planning and Transportation Abstracts. Books, articles and especially local government publications are indexed but architecture and construction represent only a small part of the coverage, which also includes housing and planning. The volume of references retrieved is often great but relevance is limited and indexing is variable. Most is British. The Building Research Establishment promised that a database would become available when they ceased Building Science Abstracts at the end of 1976 but this has not yet happened although the Property Services Agency, also part of the Department of the Environment, is developing a similar database from their Construction References, in conjunction with the CIBDOC project discussed below. This is to be called PICA. Like ACOMPLINE important standards, regulations, government and other books and booklets are listed with the journal articles. However it is currently still at the negotiation

stage. The RIBA is also negotiating to make its Architectural Periodicals Index (API) into an on-line database but, although it was promised for 1982, it is not yet available. It will provide a wide range of designer information. The particularly unique features of API are the ability to identify references to specific buildings by name and/or location, and to specific architects and practices. Documentation and fringe areas such as planning, interior and landscape design are also covered. In the United States the Avery Index to Periodicals of the Columbia Memorial Library of Architecture is now on-line and covers a similar range of topics. However because the printed edition is only up-dated with annual (or less frequent) supplements this database promises a much greater degree of currency than the printed index. Retrospective indexing also makes this unique. Both API and Avery are restricted to periodical articles.

Working Commission 57 of the International Council for Building Documentation (CIB) has set up CIBDOC in conjunction with Unesco's ARKISYST, the UIA study of information problems of architects.[6] The aim is to create a unified on-line file, using existing databases and common indexing terms. The databases made available in this way include PASCALBAT (part of the French PASCAL), BYGGDOK, RSWB, ORLIS, PICA, IBSEDEX, LINA (which contains small bibliographies on special themes in planning, housing and civil engineering, in German, from IRB), BODO also from IRB (a databank relating to planning and realisation of buildings), BAUFO and FORS.[7] Many of these are related strongly to their country of origin but have items of interest to others. It is a collection of databases rather than one new large one, and is managed by the Informationszentrum RAUM und BAU (IRB) der Fraunhofer-Gesellschaft in Stuttgart. It is offered from their computer in Karlsruhe via Euronet.

Sweden's Institute of Building Documentation's BYGGDOK corresponds partly with Byggreferat (30%) and covers building, planning, construction, environment, civil engineering and energy. But until the CIBDOC project is

completed it is available only in Swedish, although literature in English may be included in it and much research in Sweden has wider implications, especially in the use of timber. It commenced in 1975 at the same time as BYGGVARUREGISTRET produced by the Swedish Building Centre as a databank on product information - covering c.45,000 products from c.12,000 suppliers and corresponding to their printed catalogues. The future of this type of databank should be assured as it can potentially be so much more current than the printed directory.

Several German databases are included in the CIBDOC project and brief guides to their content are readily available. BAUFO and FORS from IRB itself contain references to research work in progress and completed, the former mainly on the construction side, the latter on planning and housing. RSWB (Raumordnung, Städtbau, Wohnungswesen, Bauwesen) has a broader coverage of scientific and technical literature since 1976; since 1979 including ORLIS on urban and regional planning (1974-8). All types of literature are covered including legislation and standards. It is noticeable that the mid-seventies represent the commencement not just of one but of a considerable proportion of these databases.

The most fully developed and established system for technical construction information is perhaps the French ARIANE which provides a transition from manual to computer systems and from database to databank. Subscribers purchase microform copies of a 'bank' of documents to which they are referred when the data required to answer their query is not available on-line. On-line transmission of documents page-by-page is also available. The Centre d'Assistance Technique et de Documentation (CATED) launched the service in 1970-2 with the support of the Federation Nationale du Batiment to provide for the information needs of small and medium-sized firms. Highly qualified personnel provide a back-up advice service in addition to the technical data, references, standards and regulations information on the

database. The service also differs from the librarian's bibliographic databases so far described in that it prompts the user with a series of index frames and alternative questions to specify the precise problem. Its use of index frames is similar to videotex retrieval systems. The sample search in Appendix 1 explains this.

At present this is unique but microform services do exist with the potential for use in similar ways. For example Barbour Index Ltd in the UK provide three Barbour Microfiles; Technical, Health and safety, and Products, all on microfiche with printed indexes. Technical Indexes Ltd in the UK also provide databases for construction, mechanical engineering and electronic engineering among others covering product literature, standards and regulations. In the USA their parent company, Information Handling Services offers TECH-NET, an on-line inter-active search service to their VSMF technical product and datafiles on microform. This extends across the various file divisions to assist the user and ensure full retrieval of information. A message and 'documents-on-request' service are also provided, but not yet in Europe. Full information is obtainable in the IHS Buyer's Guide from Technical Indexes Ltd in Great Britain. Reference is still made to microforms. The document delivery service can supply data but inevitably entails delay. DATEMA in Sweden has recently developed a computerised product trade name index since the British Patent Office Service ceased and this is available in Britain. Such computer indexes are likely to be developed further for designer's use even if the information referred to is not always available in machine-readable form.

Apart from CÉCILE, which is being covered by another speaker, the designer has no such coordinated effort being exerted on his behalf except where he is dependant on products used by other professionals. Yet, it could be argued that, provided architects and designers can identify the appropriate database, they are better served by the specialist databases than by an

attempt to provide comprehensive design ones. Nothing is comprehensive. The volume of information is too diverse and great. However it would be helpful if the commercial hosts could build in automatic prompts between databases where a searcher might find useful information in another database within the system. For example, a search on COMPENDEX (Engineering Index) for design information related to a plastics product would trigger the system to point out that further information might be found on RAPRA from the Rubber and Plastics Research Association (on INFOLINE only). There are already systems whereby the searcher can opt to ask the host both to indicate in which databases the terms required are found in most volume and also whereby a search parameter can be stored and matched with various databases in succession. One must still know the databases required or consult the indexing and listing programmes of the host. This, and the fact that the searcher will not be transferred to databases on other hosts, means that the librarian or information officer becomes a necessary interface. For example he can lead the designer interested in fatigue of an aluminium alloy to Weldasearch, ISMEC (Information Services in Mechanical Engineering, USA), METADEX, BNF-metal, ALUMINIUM and World Aluminium Abstracts among others and available on different hosts themselves.

Any of these may be supplemented by information from such a large and well-established database as Chemical Abstracts for data on the corrosion problems. Fringe references would be found in the more general databases such as NTIS, GPO Monthly Catalogues, the new HMSO catalogue database, Conference Proceedings Index and Conference Papers Index (GB & USA), the British Library's Reports, Translations and Theses augmented by Research in British Universities, Polytechnics and Colleges, both due to be available on BLAISE. The possibilities are not only limitless but also frightening when one also realises that research in a government laboratory may be reported only in the government indexing service and yet have very far-reaching consequances.

Standards are vital to all. The French NORIANE already provides access to standards on-line as does STANDARD NORSK. The British Standards Institution is currently working towards providing standards on-line. Other countries are bound to follow.

Designers must be aware of the various patents databases such as INPADOC, PATSEARCH and WPI (World Patents Index). It is with these that experiments with new laser technology have been made by INFOLINE to enable drawings to be called up and printed on demand. Such developments will be extremely advantageous to all users of visual information. Videodiscs are becoming a media for communication of databases if firms can develop cheaper hardware with increased storage capacity. The nature and use of patent information has made these databases the testing ground for new technology and the volume of databases is considerable since the search for novelty itself is difficult to achieve manually.

Regulations and legislation are another field into which database providers have expanded. Designers' needs range from contractual procedures and legislation related to practices through to regulations governing products in various countries according to the market. The range is wide and must be understood in order to get the information required. Appendix 2 shows the range of a sample of US law databases. Nationalism restricts applications. British law is mainly available through LEXIS which offers a database covering case law, statutes and other references using a keyword search system. It is available only on subscription from Butterworths, not from a recognised 'host'. European law is available on EUROLEX and on PRESTEL there is INFOLEX, a closed user group consisting mainly of case law, and LAWTEL covering articles and case indexes. It was noted recently that many cases now seem to use the same citations in court to support their arguments rather than the diversity which used to be the practice. This is thought to be due to use of such services refering to the same index of cases.

So far I have kept fairly closely to my brief to discuss databases but I would like to look briefly at the development of videotex or viewdata systems. Under a variety of names, CAPTAIN in Japan, TELEDON in Canada, TELETEL in France and PRESTEL in Great Britain, systems of databanks are being developed for domestic and business users. An adapted TV makes them more accessible than the database systems for which one must have a terminal and modem link, or a microcomputer. The system of increasingly precise index pages theoretically makes all the information available to everyone without further aids. Many users have found it quicker and more reliable to proceed using one of the printed indexes, or directories. While I confess to not being up-to-date with developments in other countries the most important development in PRESTEL has been the opening, in the middle of 1982, of the Gateway facility. This permits access via the PRESTEL 'host' to all other computers which have become part of the system. Hence IBSEDEX, the Building Services Research and Information Association database, available privately to members, and through CIBDOC, could be accessed through this system were BSRIA to become a Gateway subscriber with compatible databanks and equipment.

For the large architectural or design firms this could, in theory, mean plugging in on-site, at home or abroad, (since PRESTEL is available on Euronet), via Gateway to the office computer, his own design office database, and its programs, whether to use it to check calculations, the address of a manufacturer specified or to find alternatives to those specified, or just to review messages left for him. The information officer could also get data and bibliographical references from smaller databases which may not be on the large hosts. Others could make available such databases knowing that only registered users could access them via Gateway. The Association of Construction Industry Information Providers should act as an intermediary for those who wish to make data available, and have a database, but lack the expertise in creating a PRESTEL-style database. Developments in the organisation of the majority of office information by computer could make product inform-

ation and statistics available this way. The Building Centre might develop a databank of product names, manufacturer's addresses and product data which could be accessible via PRESTEL Gateway with an electronic mail service for trade literature. As the computer becomes the norm for indexing information as potential databases will exist everywhere to be tapped in this way. The commercial hosts would then have to look at their services to see how they should be mounted. Similarly the Design Centre might make their Design File, currently on microfiche, available this way when there is adequate graphic capability, or Fax machinery more generally held by practices. The problem of identification of appropriate databases will increase, so will duplication of content.

It is the use of the computer for print production which has led to more databases being suggested. Hansard is now computer-type-set and the spin-off will be a computer databank as soon as the legalities of putting it up are settled. The Central Statistical Office in England, CRONOS in Europe and the Congressional Statistical Service in the USA, among others are making figures available on-line as a spin-off from other processes. In some instances this may even threaten the production of print since figures are very costly to type-set. Many of the company directories giving commerical information are candidates for computer databases because dates, addresses, products, directors etc. change quickly. Printed editions are out-of-date quickly and usually only amended annually. Instant up-dating could be attractive, and international access would then be easier. Many practices now work in more than one country and contacts in the Middle East have shown the need for access to information of this type more easily. The main problem will be knowing what is available where as at present. But the librarian and information officer cannot afford to ignore all these developments which are a considerable side-step from traditional lines of librarianship.

Location being the main problem it might be advisable to indicate the most reliable sources of information on these databases since many here will

not be used to using on-line sources. While all hosts provide their own manuals these are limited in scope and when deciding where to search a more general list is necessary. The Cuadra Associates Directory of Online Databases from California, is particularly useful because it is more regularly up-dated than others. Also useful for their descriptive listings are the Encyclopaedia of Information Sysytems and Services (5th ed. J. Schmittroth, Gale, 1982) and Williams, M Computer-readable Databases Directory and Data Sourcebook. (Knowledge Industry Inc., 1982). The third edition of J.Hall's Online Bibliographic Databases (Aslib, Feb. 1983) gives details of 179 databases and includes a bibliography but is by no means comprehensive.

The Eusidic Database Manual (1983), while useful, is not limited to on-line databases but includes those which are available off-line for use on referral. It has a European bias. Databases in Europe is due in 1983(Pergamon). Originally published by Euronet/Diane this covers databases available on the network. European Database Guide from Infortecture Europe (France, 1983) also covers Europe and their newsletter, Infotecture Europe, appears 18 times a year, up-dating this.

Journals issue lists of subject databases from time-to-time. Online (v.1,1977) and Database (v.1.,1978) are useful as is Euronet Diane News and the newsletter of the Online Information Centre at Aslib, GB. The latter also prepare guides and subject lists - their forthcoming Online databanks, by J B Deunette, should be useful as its coverage is worldwide although it only gives those accessible in GB Their Online Search Services[1] has been mentioned. Others will be found in most countries. A guide to architecture and planning databases is also due out at the end of 1983.

The importance of such directories has been underlined by the wide range and volume of databases mentioned already, as well as the increasing number of commercial hosts. Many users do not realies that Euronet Diane is a

network linking hosts and not a host. Each host must still be contacted individually. A list of the databases available on a host like Dialog (in January 1983) shows that 50 of the databases are likely to be of use to architects and 41 to designers at any time. See Appendix 3. This shows how valuable the multi-file search capability can be.

However to use the same search strategy against different databases even on one host it must be remembered that there may be a big price difference among the databases used. A specific database might actually be more reliable, if it exists, than the inter-disciplinary databases like SCISEARCH, SOCIAL SCISEARCH or ERIC. Vocabulary used may vary and some databases go back in time farther than others. The same file provided by different hosts may cover a different time-scale e.g. COMPENDEX and CHEMABS both vary. It is perhaps better at present to seek help than to try to 'go-it-alone' when starting to use on-line services. When there are simpler access systems, if ever, the designer may be able to select and search files himself successfully. It has been shown in many of the journals and guides mentioned that the result of the same search can vary with the expertise of the searcher, the formulation of the search and the understanding of the databases. The same databases mounted by different hosts may even give a different answer to the same question to the experienced searcher. Some more general problems are still better answered in the traditional manner - some users find it difficult to appreciate that the computer cannot think and produce the fringe references and data which the human eye perceives and realises to be relevant.

In the future indexing may improve. Although the use of databases presents few problems for the academic, for the designer in practice the problems may appear insurmountable. Information brokers in many parts of the world have been mentioned and they have facilities to conduct searches for those without knowhow or equipment. Lists of these will be found at national information centres such as Aslib's Online Information Centre or in Information Trades Directory.

But this does not get over the fundamental inadequacy of database coverage for architect and designers at present although in several years time it seems that the architect will have less about which to complain, that is, if present plans come to fruition. The designer may never find himself in that position simply because design itself is nebulous in its coverage - interior, graphic, industrial etc. It is essential therefore that emphasis is placed on making databases more accessible to everyone not just in terms of hardware and software but in terms of explanatory material and guides, indicating what to use and giving evaluative data on performance. The hosts need to have more common access or a central registry so that Euronet becomes a real inter-connecting network. The development of the electronic journal and document delivery service should be included within the comprehensive system since those in practice will turn to the simpler but less comprehensive databank in preference to a bibliographic reference base without the guarantee that what is identified can be accessed. International cooperation in schemes such as CIBDOC may be the first stage towards achieving this but there is a long way to go yet.

REFERENCES

1 Deunette, J B UK Online Search Services. 2nd ed. Aslib for the Online Information Centre, 1982.

2 Mackinder, M & Marvin, H Design decision-making in architectural practice. York, University of York, Institue of Advanced Architectural Studies, 1982. (Research paper 19)
and
S.B. Lera's research at the Building Research Establishment - private communication and a short article, At the point of decision. How does a design team reach decisions. Building v.242(7243(22)) 28.5.82 pp47-48.
and
Thompson, G. Surviving in the information jungle. RIBA Journal v.89(2) 1982 pp23-25

3 Bullivant, D Furthering information Building 17.9.82 pp38-39

4 Taylor, F If that's all there is to it, I might go try it tomorrow. Designer February 1981 pp5-8

5 Bradfield, V J Sources of information in architecture. Butterworth, 1982.

6 See Unesco Journal of Information Science, Librarianship and Archives Administration v.3(4) 1981 pp210-216

7 Described in a paper available from them .

APPENDIX 1 Sample of a search from ARIANE

The following is an example of a search which either an architect or designer might have performed. It is taken from the sample searches supplied by CATED and shows five index frame stages leading to information pages.

Protection d'un garde-corps de balcon en acier par métallisation ?

L:GARDE_CØRPS

PAGE 01
GARDE-CØRPS (A)

01 GARDE-CØRPS DANS LES LØCAUX D'HABITATIØN
02 GARDE-CØRPS DANS LES LØCAUX INDUSTRIELS
03 CØNCEPTIØN ET MISE EN ØEUVRE DES GARDE-CØRPS
04 CLASSEMENT DES GARDE-CØRPS
05 FISSURATIØN DES GARDE CØRPS
06 P01-012 (DIMENSIØNS DES GARDE-CØRPS.)
07 P01-013 (RESISTANCE DES GARDE-CØRPS PREFABRIQUES.)
08 GARDE CØRPS ET MAIN CØURANTE
09 * GARDE-CØRPS EN ACIER ØRDINAIRE ØU GALVANISE
10 * GARDE-CØRPS EN ACIER INØXYDABLE
11 * GARDE-CØRPS EN ALLIAGE LEGER
VØUS ETES SUR UN NØEUD HØMØNYME ØU RENVØI

9

PAGE 01*
* GARDE-CØRPS EN ACIER ØRDINAIRE ØU GALVANISE

01 PRØTECTIØN CØNTRE LA CØRRØSIØN DES PARTIES METALLIQUES
02 GARDE-CØRPS (A)

VØUS PØUVEZ DEMANDER LES MARQUES DES PRØDUITS ET LES SØCIETES

1

PAGE 01*
PRØTECTIØN CØNTRE LA CØRRØSIØN DES PARTIES METALLIQUES

01 ANØDISATIØN
02 GALVANISATIØN
03 METALLISATIØN PAR PRØJECTIØN
04 PEINTURES ET VERNIS ANTICØRRØSIØN

5

PAGE 01*
METALLISATIØN PAR PRØJECTIØN

01 METALLISATIØN PAR PRØJECTIØN DE ZINC ØU ALLIAGE ZINC-ALUMINIUM
02 METALLISATIØN PAR PRØJECTIØN DE L'ALUMINIUM
03 METALLISATIØN PAR PRØJECTIØN DU PLØMB
04 * PEINTURES PØUR METAUX NØN FERREUX (SAUF LES PRIMAIRES REACTIVES)
05 * MATERIEL ET PRØCEDES DE METALLISATIØN
06 * FILS METALLIQUES PØUR METALLISATIØN
07 REVETEMENTS PAR PEINTURES RICHES EN PØUDRES METALLIQUES
08 PRØTECTIØN CØNTRE LA CØRRØSIØN DES PARTIES METALLIQUES

1

PAGE 01*
METALLISATION PAR PROJECTION DE ZINC OU ALLIAGE ZINC-ALUMINIUM

01 RESISTANCE A LA CORROSION DE L'ACIER GALVANISE
02 METALLISATION AU PISTOLET (ZINC, ALUMINIUM, PLOMB) : NORMES
03 RESISTANCE A LA CORROSION DU ZINC ET DE SES ALLIAGES
04 * PRODUITS POUR PASSIVATION DES METAUX NON FERRIFERES
05 SABLAGE DES SURFACES METALLIQUES

T:T

PAGE 1
METALLISATION PAR PROJECTION DE ZINC OU ALLIAGE ZINC-ALUMINIUM

TECHNIQUE
ZINGAGE PAR METALLISATION AU PISTOLET

L'APPLICATION DU ZINC AU PISTOLET DOIT ETRE PRECEDEE D'UN SABLAGE A BLANC (SA3) OU D'UN GRENAILLAGE. CE TYPE DE REVETEMENT FAIT L'OBJET DE LA NORME FRANCAISE NF A 91.201. (VOIR M641ID-IK)
LES DEPOTS DE ZINC PROJETES SONT SYMBOLISES AINSI:
ZN 40 (IV), ZN 80 (IV), ZN 120 (IV), ZN 200 (IV), SELON LEURS EPAISSEURS MINIMALES, EXPRIMEES EN MICRONS.
LA DETERMINATION DE L'EPAISSEUR DE LA COUCHE DE ZINC EST

PAGE 02*
METALLISATION PAR PROJECTION DE ZINC OU ALLIAGE ZINC-ALUMINIUM

FONCTION A LA FOIS DES CARACTERISTIQUES DE L'AGENT DE CORROSION ET DE LA DURABILITE DEMANDEE POUR LA PROTECTION.
LES EPAISSEURS GENERALEMENT ADMISES SONT:
INTERIEUR DES BATIMENTS (MENUISERIE METALLIQUE): 40 MICRONS
ATMOSPHERE RURALE OU URBAINE NON SALIE PAR DES VAPEURS ACIDES: 80 MICRONS
ATMOSPHERE MARINE: 120 MICRONS
ATMOSPHERE MARINE CHARGEE D'ECLABOUSSURES SALINES: 200 MICRONS

PAGE 01*
METALLISATION AU PISTOLET (ZINC, ALUMINIUM, PLOMB) : NORMES

01 NORMALISATION CONCERNANT LES REVETEMENTS METALLIQUES ET TRAITEMENTS DE SURFACE DES METAUX
02 METALLISATION PAR PROJECTION
03 A91-201 (REVETEMENTS METALLIQUES METALLISATION AU PISTOLET ZINC ALUMINIUM PLOMB)

VOUS ETES SUR UN NOEUD HOMONYME DU RENVOI

PAGE 01*
A91-201 (REVETEMENTS METALLIQUES METALLISATION AU PISTOLET ZINC ALUMINIUM PLOMB)
01 REVETEMENTS METALLIQUES, MESURE DES EPAISSEURS : METHODE MAGNETIQUE OU ELECTRIQUE
02 REVETEMENTS METALLIQUES & TRAITEMENTS DE SURFACE DES METAUX : NORMES
03 METALLISATION AU PISTOLET (ZINC, ALUMINIUM, PLOMB) : NORMES

T:R

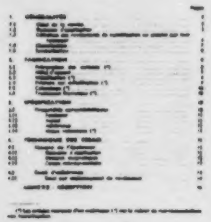
PAGE 1*
A91-201 (REVETEMENTS METALLIQUES METALLISATION AU PISTOLET ZINC ALUMINIUM PLOMB)
REGLEMENTATION
NORME HOMOLOGUEE NF A 91-201. DECEMBRE 1966. (VOIR M641,I,D-K;)
REVETEMENT METALLIQUES. METALLISATION AU PISTOLET ZINC-ALUMINIUM - PLOMB.

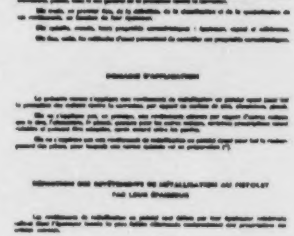
M641,I,D-K;

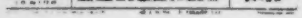
BEST COPY AVAILABLE

Vue 641 ID

A 91-201







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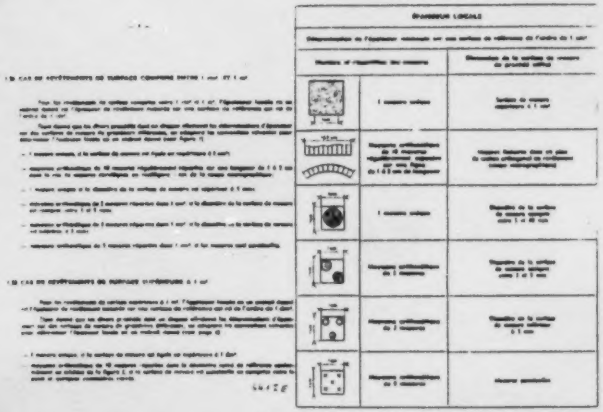
Vue 641 IE



641 IE

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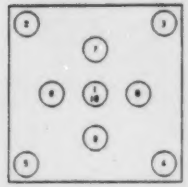
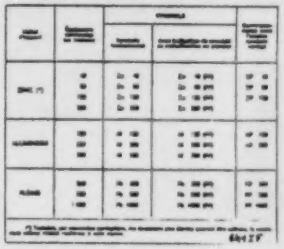
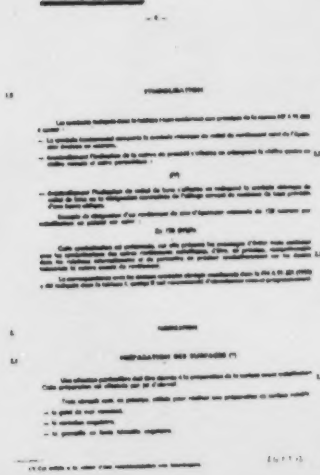
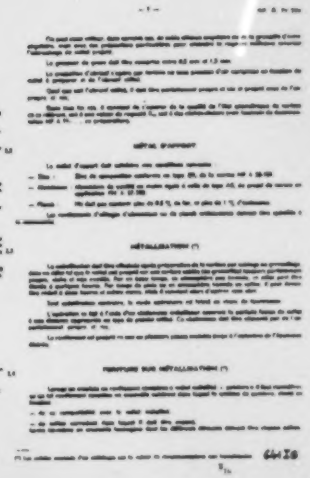




641 IF

Vue 641 IG





641 IG

APPENDIX 2 Legal databases

The following list is taken from Hoover, R E Online search strategies . Knowledge Industry Inc., 1982.

Primary authority databases

Name	Producer	'Host'
CHEMLAW	Bureau of National Affairs	NIH/EPA CIS
CIS/INDEX	Congressional Information Service	DIALOG,SDC
ELECTRONIC LEGISLATIVE SEARCH SYSTEM (ELSS)	Commerce Clearing House	ELSS
FEDERAL INDEX (FEDEX)	Capitol Service International	DIALOG,SDC
FEDERAL STATE REPORTS LEGISLATIVE TRACKING SYSTEM (FSRLTS)	Federal State Reports Inc	Producer
FEDREG	Capitol Services International	DIALOG,SDC
FRSS (Federal Register Search System)	National Institutes of Health: Environmental Protection Agency	NIH/EPA CIS
LEGISLATE	Legi-slate	I P Sharp
LEGISLEX	Legislex Associates	National CSS
LEXIS	Mead Data Central	Mead
PUBLIC AFFAIRS INFORMATION	Public Affairs Information Inc	PAI
REG-ULATE	Legi-Slate	I P Sharp
WESTLAW	West Publishing Co.	West

Secondary publications databases

ABI/INFORM	Data Courier Inc	BRS,DIALOG,SDC
ACCOUNTANT'S INDEX	American Institute of Certified Accountants	SDC
CLAIMS	IFI/Plenum	DIALOG
DISCLOSURE	Disclosure Inc	DIALOG
DOW JONES NEWS/Retrieval Service	Dow Jones & Co Inc	Dow Jones
ERIC	National Institute of Education	BRS,DIALOG,SDC
THE INFORMATION BANK	New York Times Information Service	BRS NYTIS
LEGAL RESOURCES INDEX	Information Access Corp	DIALOG
MAGAZINE INDEX	" " "	DIALOG
MEDLINE	National Library of Medicine	BRS,DIALOG,NLM
NCJRS (National Criminal Justice Reference Service)	National Institute of Justice	DIALOG
NATIONAL NEWSPAPER INDEX	Information Access Corp.	DIALOG
NDEX (Newspaper Index)	Bell & Howell	SDC
NEWSEARCH	Information Access Corp.	DIALOG
NEXIS	Mead Data Central	Mead
PATSEARCH	Pergamon International Information Corp.	BRS
PsycINFO	American Psychological Assoc.	BRS,DIALOG,SDC
SOCIAL SCISEARCH	Institue for Scientific Information	BRS,DIALOG
STANDARD & POOR'S NEWS ONLINE	Standard & Poor's Corp.	DIALOG
USPATENTS	Derwent Publications	SDC
WPI (World Patents Index)	" "	SDC

N.B. Many of the first list are not available on the major hosts but many in the second list are only of fringe interest for legal references.

APPENDIX 3 List of databases on DIALOG.

ABI/INFORM d
ADTRACK
AGRICOLA a
AIM/ARM
AMERICA HISTORY AND LIFE
AMERICAN MEN AND WOMEN OF SCIENCE
APTIC
AQUACULTURE
AQUALINE a
AQUATIC SCIENCES & FISHERIES ABSTRACTS a
ARTBIBLIOGRAPHIES MODERN ad
BHRA FLUID ENGINEERING a
BI/DATA FORECASTS:TIMESERIES
BIOGRAPHY MASTER INDEX ad
BIOSIS PREVIEWS
BLS - several economic indices
BOOK REVIEW INDEX ad
BOOKS IN PRINT ad
CA SEARCH ad
CAB ABSTRACTS a
CAREER PLACEMENT REG
CATFAX
CHEMICAL INDUSTRY NOTES
CHEMICAL REGS & GUIDELINES SYSTEMS
CHEMANE
CHEMSEARCH
CHILD ABUSE AND NEGLECT
CHRONOLOG NEWSLETTER
CIS ad
CLAIMS
COFFEELINE
COMPENDEX ad
COMREHENSIVE DISSERTATION INDEX ad
CONFERENCE PAPERS INDEX ad
CONGRESSIONAL RECORD ABSTRACTS
CRIMINAL JUSTICE PERIODICAL INDEX
CRIS/USDA
DIALINDEX
DISCLOSURE II
DOE ENERGY a
DUNS MARKET IDENTIFIERS
ECONOMICS ABSTRACTS INTERNATIONAL
EIS INDUSTRIAL PLANTS
EIS NONMANUFACTURING ESTABLISHMENTS
ELECTRIC POWER DATABASE
ELECTR YELLOW PAGES - CONSTRUCTION a
ELECTR YELLOW PAGES - PROFESSIONALS d
ELECTR YELLOW PAGES + 5 others
ENCYCLOPAEDIA OF ASSOCIATIONS ad
ENERGYLINE a
ENERGYNET a
ENVIROLINE a
ENVIRONMENTAL BIBLIOGRAPHY a
ERIC d
EXCEPTIONAL CHILD EDUCATION RESOURCES
EXCERPTA MEDICA
FEDERAL INDEX
FEDERAL REGISTER ABSTRACTS
FIND/SVP REPORTS & STUDIES INDEX
FOOD SCIENCE & TECHNOLOGY ABSTRACTS d
FOODS ADLIBRA
FOREIGN TRADERS INDEX ad
FOUNDATION DIRECTORY ad
FOUNDATION GRANTS INDEX ad
FROST & SULLIVAN DM
GEOARCHIVE a
GEOREF a
GPO MONTHLY CATALOG ad
GPO PUBLICATIONS REFERENCE FILE ad
GRANTS ad
HARFAX INDUSTRY DATA SOURCES
HEALTH PLANNING & ADMINISTRATION a
HISTORICAL ABSTRACTS
INPADOC d
INSPEC ad
INSURANCE ABSTRACTS
INTERNATIONAL PHARMACEUTICAL ABSTRACTS
INTERNATIONAL SOFTWARE DIRECTORY d
IRIS
ISMEC d
JOURNAL OF ECONOMIC LITERATURE
LABOR LAW
LANGUAGE AND LANGUAGE BEHAVIOUR ABSTRACTS
LEGAL RESOURCE INDEX ad
LIFE SCIENCES COLLECTION
LISA
MAGAZINE INDEX
MANAGEMENT CONTENTS
MARC
MATHFILE
MEDLINE a
MENTAL HEALTH ABSTRACTS a
METADEX ad
METEOROLOGICAL/GEOASTROPHYS ABSTRACTS a
MICROCOMPUTER INDEX d
MILLION DOLLAR DIRECTORY
MLA BIBLIOGRAPHY
NATIONAL FOUNDATIONS
NATIONAL NEWSPAPER INDEX
NCJRS
NEWSEARCH
NICEM
NICSEM/NIMIS
NONFERROUS METALS ad
NTIS ad
OCEANIC ABSTRACTS
ONLINE CHRONICLE
PAIS INTERNATIONAL
PAPERCHEM d
PATLAW d
PHARMACEUTICAL NEWS INDEX
PHILOSPHERS INDEX
PIRA d
POLLUTION ABSTRACTS a
POPULATION BIBLIOGRAPHY
PSYCHINFO ad
PTS F & S INDEXES ad
PTS - several series
RAPRA ABSTRACTS ad
REMARC

RIIM ABSTRACTS
SCISEARCH ad
SOCIAL SCISEARCH ad
SOCIOLOGICAL ABSTRACTS ad
SPIN
SSIE CURRENT RESEARCH
STANDARD & POORS NEWS
STANDARD & POORS SPECIFICATIONS ad
TRADE & INDUSTRY INDEX
TRADE OPPORTUNITIES
TRIS
TSCA INITIAL INVENTORY
ULRICH'S INTERNATIONAL PERIODICAL DIRECTORY
US EXPORTS
US POLITICAL SCIENCE DOCUMENTS
US PUBLIC SCHOOL DIRECTORY
WATER RESOURCES ABSTRACTS
WELDASEARCH ad
WORLD AFFAIRS REPORT
WORLD ALUMINIUM ABSTRACTS ad
WORLD TEXTILES d

APPENDIX 4

OUTLINE LIST OF DATABASES AVAILABLE

Name	Brief subject coverage	Hosts
ABI/INFORM	business, management	DATA-STAR,SDC DIALOG,ESA-IRS
ACCOUNTANTS INDEX	accounting, business	SDC
ACOMPLINE	building, architecture, local government, housing,planning	ESA-IRS
ADTRACK	advertising	DIALOG
AGLINE	agriculture, buildings	SDC
AGREP	agriculture, EEC	DIMDI
AGRICOLA	agriculture	BRS,SDC,DIALOG, DIMDI
AGRIS	agriculture, food, buildings & packaging	ESA-IRS,DIMDI
ALUMINIUM	aluminium & applications	ESA-IRS
AMERICA HISTORY & LIFE	history, including art etc.	DIALOG
AEMRICAN MEN & WOMEN OF SCIENCE	biographies	BRS
APILIT	petroleum & related topics	SDC
APTIC	air pollution	DIADOG
AQUALINE	water, buildings	DIALOG, ESA-IRS
ARIANE	construction	CATED
ARTBIBLIOGRAPHIES MODERN	art & design,architecture	DIADOG
ASFA	aquatic sciences & fisheries	DIALOG,DIMDI
AMERICAN STATISTICAL SERVICE	statitsics	DIALOG, SDC
BAUFO	building,construction	INKA
BEI (British Education Index)	schools, colleges etc.	Euronet
BIBLIO DATA	German books & serials	Euronet
BIOGRAPHY MASTER INDEX	biography	DIALOG
BIOSIS	biology,	ESA-IRS
BIPA	French news, govt documents	ESA-IRS,SDC,QUESTEL
BI/DATA	buiness forecasts	DIALOG
BLS (US,Bureau of Labor Statistics)	time series on prices, labor, earnings	DIALOG
BNF ABSTRACTS	non-ferrous metals	ESA-IRS, DIALOG
BOOKS IN PRINT	books on all subjects	DIALOG,BRS
BOOKSINFO	books in print	BRS
BSI/PGI	computer science	QUESTEL
BYGGDOK	building	Euronet
BYGGVARUREGISTRET	products for building	Euronet
CAB ABSTRACTS	agricultural buildings	DIALOG,DIMDI,ESA
CA SEARCH (Chemical Abstracts)	chemistry and materials	BRS,ESA-IRS,DATA-STAR,DIALOG,SDC, INFOLINE
CAREER PLACEMENT REGISTRY	professional recruitment	DIALOG
CBPI	Canadian industry,technical	SDC
COMPREHENSIVE DISSERTATION INDEX	dissertations all subjects	BRS,DIALOG
CEE	European court case law	Euronet
CETIM	mechanical engineering	Euronet
CHEMICAL REGULATIONS AND GUIDELINES	US regulations	DIALOG
CIS ABSTRACTS	occupational health & safety	
CIS INDEX	US congressional information	DIALOG
CISI-AFO	French stock exhhange	Euronet
CISI-BIR	environmental research	Euronet
CISI-BRUIT	acoustics of building materials	Euronet
CISI-ELECNUC	nuclear power stations	
CISI-OFCE	French companies	Euronet
CISI-PI	OECD economic indicators	Euronet
CISI-SCE	OECD external trade indicators	Euronet
CISI-TRANSINOVE	transferrable technology	Euronet
CIVILE	Case law, Rome	Euroent
CLAIMS/US PATENT ABSTRACTS	patents in chemistry & enigneering	DIALOG
CNI	Canada newspaper index	SDC
CNRSLAB	laboratories & research units	QUESTEL
COAL DATABASE	coal & mining	Euronet
COMPENDEX	construction, engineering, design	DIALOG,ESA-IRS,SDC DATA-STAR,INFOLINE BRS, INKA
CONF	conference proceedings, all subjects	SDC
CONFERENCE PAPERS INDEX	" "" "US	DIALO,ESA-IRS
CONFERENCE PROCEEDINGS INDEX	" "" "GB	BLAISE
CONGRESSIONAL RECORD	US Congress	DIALOG, SDC
CONSTA CORTEC COSTIT	Italian State Council case - articles law - Constitution	Euronet
CRDS	synthetic chemistry	SDC
DAFSA	company ownership	Euronet
DISCLOSURE II	US company information	DIALOG
DKF	transport vehicles	Euronet
DKI	rubber plastics fibres	Euronet
DOW JONES	business industry	BRS
DOMA	mechanical & production engineering	Euronet
DRE	eletronic technology	Euronet
DUN'S MARKET IDENTIFIERS	business information	DIALOG
EABS	European reports	Euronet
EDIB	energy	SDC
ECONOMIC ABSTRACTS	economics	DIALOG

EDB	energy	Euronet
EDF-DOC	energy	ESA-IRS,QUESTEL
EI ENGINEERING MEETINGS	conference proceedings	ESA-IRS
EIS INDUSTRIAL PLANTS	directory of US plants	DIALOG
EIS NONMANUF ESTABS	directory of US nonmanufacturing companies	DIALOG
ELCOM	electronics and computing	SDC
ELECTRONIC YELLOW PAGES	US companies and individuals	DIALOG
EPRI	electric power research in progress	DIALOG
ELSPECS	electronic components specs	Euronet
ENCYCOLOPAEDIA OF ASSOCIATIONS	all subjects	DIALOG
ENDOC	enviornmental centres in EEC	Euronet
ENERGY DATABASE	energy	BRS,DIALOG,SDC, INKA
ENERGYLINE	energy	DIALOG,ESA-IRS, SDC,BRS,INKA
ENERGYNET	energy directory	DIALOG,ESA-IRS
ENEX	register of experts on environment	Euronet
ENREP	environmental research,EEC	Euronet
ENVIROLINE	environment	DIALO,ESA-IRS, SDC,BRS
ENVIRONMENTAL BIBLIOGRAPHY	environment	DIALOG
ENVIRONMENTAL IMPACT STATEMENTS	environment	BRS
EPIA	electrical, energy	SDC
ERGODATA	design data,ergonomics	Euronet
ERIC	education, schools,design	BRS,DIALOG,SDC
ESSOR	French copmanies	QUESTEL
EURECOPI	directory of data processing programs, phsical & chemical engineering	Euronet
EXCERPTA MEDICA	medical facilities	DIALOG,DIMDI, DATA-STAR
FEDERAL INDEX	US legislation	DIALOG,SDC,BRS
FIND/SVP REPORTS & STUDIES INDEX	industry & market reports	DIALOG
FINTEL	company information	DATA-STAR,BRS
FOODS ADLIBRA	food technology & packaging	DIALOG
FOREIGN TRADES INDEX	foreign importers of US goods	DIALOG
FOREST PRODUCTS	timber and related materials	SDC
FORS	research projects	INKA
FOUNDATION GRANTS INDEX	grants awarded by foundations	DIALOG
FRANCE ACTUALITE	French current affairs	ESA-IRS
FRANCIS	social sciences, humanities	QUESTEL
GEOARCHIVE	geology, foundations	DIALOG
GEODE	earth sciences, mining	QUESTEL
GEOLINE	geoscience	INKA

GEODIM	geophysical bibliography,the Alps	Euronet
GEOMECHANICS	geomechanics,foundations	INFOLINE
GEOREF	geology	DIALOG,SDC
GPO PUBLICATIONS	US government publications	BRS, DIALOG
GRANTS	grants available	DIALOG,SDC
HEALTH PLANNING & ADMINISTRATION	buildings, design data	BRS,DIMDI, NLM,DIALOG
HSE-LINE	health & safety	ESA-IRS
IBIS	production & distribution companies in 130 countries	Euronet
IBSEDEX	building services,energy	Euronet
IEA-COAL	coal research	INKA
INKA-CONF	conference announcements in energy etc	INKA
INKA-CORP	corporations in energy+	INKA
INKA-DATACOMP	data compilation in energy+	INKA
INKA-MATH	mathematics	INKA
INKA-NUCLEAR	nuclear information	INKA
INKA-PHYSIK	physics	INKA
INPADOC	international patents	DIALOG,INKA
INPI-I	patents in France	QUESTEL
INPI-2	patents in Europe	QUESTEL
INSPEC	computer applications, electrical and physical sciences	BRS,DATA-STAR,SDC DIALOG,ESA-IRS,INKA
INSURANCE ABSTRACTS	insurance	DIALOG
INTERCIM	cements	QUESTEL
INERNATIONAL ROAD RESEARCH DOC.	road, transprot engineering	Euronet
INTERNATIONAL SOFTWARE DIRECTORY	computer programs	DIALOG
IRIS	water	DIALOG
ISI COMPUMATH	computer applications, math	
ISI GEOSCITECH	earth sciences, technology	
ISI ISTP	conference proceedings, science and technology	
ITIS	business data 90 countries	Euronet
KOMPASS	55000 French companies	Euronet
LABORDOC	International Labour Organisation documents	SDC
LEGAL RESOURCE INDEX	legal literature	DIALOG
LEX	French legal literature	QUESTEL
LINA	planning	INKA
LISA	library buildings, information	DIALOG,SDC
MANAGEMENT AND MARKETING ABSTRACTS	management, packaging	INFOLINE
MANAGEMENT CONTENTS	management	BRS,DATA-STAR, DIALOG, SDC
MEDOC	health facilities	BRS

MENTAL HEALTH ABSTRACTS	mental health facilities	BRS
MERLIN-GERIN I	business, management	Euronet
MERLIN-GERIN II	elctricity, electronics	Euronet
METADEX	metals	DIALOG, ESA-IRS, INKA
METEOROLOGICAL AND GEOASTROPHYSICAL ABSTRACTS	climate,	DIALOG
MICROCOMPUTER INDEX	microcomputers	DIALOG
NATIONAL FOUNDATIONS	grants awarded	DIALOG
NATIONA LNEWSPAPER INDEX	US newspapers	DIALOG
NIMH	psychology, behavioural science	BRS, DATA-STAR, DIALOG
NORIANE	French standards	QUESTEL
NPL-SGTE	thermodynamics	Euronet
NTIS	US government reports	BRS, DATA-STAR, SDC DIALOG, ESA-IRS, INKA
ORLIS	urban planning	INKA
PAIS	public affairs	BRS, DIALOG
PAPERCHEM	paper, boards	SDC, DIALOG
PASCAL CNRS	physics, geology, engineering	ESA-IRS, QUESTEL
PATLAW	US patent law	INFOLINE, DIALOG
PICA	construction	Euronet
PIRA	paper, packaging, printing	DIALOG, INFOLINE
POLIS	parliamentary information on all subjects in GB	SCICON
POLLUTION ABSTRACTS	pollution	BRS, DIALOG, ESA-IRS
POWER	energy	SDC
PTS PROMPT	buriness	BRS, DATA-STAR, DIALC
PSYCHINFO	psychology	BRS, DATA-STAR, SDC DIMDI, DIALOG
RAPRA	rubber, plastics, polymers	DIALOG, ESA-IRS
RBUPC	research GB, all subjects	DIALOG, ESA-IRS
RSWB	urban and regional planning	INKA
SAE ABSTRACTS	motor engineering	SDC
SAFETY	safety	SDC
SANI	Itlaian companies	Euronet
SCISEARCH	science, technology	DIALOG
SDIM1 & SDIM2	metals	INKA
SEB	financial, economic information	Euronet
SIBV	Italian stock market	Euronet
SOCIAL SCISEARCH	social sciences	DIALOG, DIMDI, BRS
SOCIOLOGICAL ABSTRACTS	sociology	DIALOG
SPIN	physics, astronomy	DIALOG
SPORT	sport, recreation facilities	SDC
SSIE (Smithsonian)	research in progress US	BRS, DIALOG, SDC

STANDARDS AND SPECIFICATIONS		DIALOG, ESA-IRS
SURFACE COATINGS ABSTRACTS	paints, films	DIALOG
SUSIS	sports	Euronet
TELEDOC	telecommunications	QUESTEL
TEXTILE TECHNOLOGY DIGEST	textiles, applications	DIALOG
THERMODATA	thermodynamics	Euronet
TITUS	textiles	SDC, QUESTEL
TRADE OPPORTUNITIES	industry	DIALOG
TRIS	transportation	DIALOG
TROPAG	tropical agriculture & needs	SDC
ULRICHS [illegible] PERIODICALS DIRECTORY	periodicals all subjects	BRS, DIALOG
UNEMET	environment, planning	QUESTEL
USGCA	US government contracts	SDC
US PATENTS	patents	SDC
VISDATA	regulatory information	INKA
WATERLIT	water	SDC
WATER RESOURCES ABSTRACTS	water	DIALOG
WELDASEARCH	metals, plastics, jointing	DIALOG
WORLD ALUMINIUM ABSTRACTS	metals	DIALOG, ESA-IRS
WORLD TEXTILE	textiles	DIALOG, INFOLINE
WORLD TRANSINDEX	science, technology translations	ESA-IRS
WPI	world patents	SDC
ZOOLOGICAL RECORD	zoos, animal s	Euronet

Note

This list is only a guide to the types of database available. It is not comprehensive and titles change so fast that a current directory should be consulted. In some cases directories also list the same database under several versions of its name e.g. PSYCHABS vs PSYCHINFO should be checked to ensure that there are no differences between the databases referred to although they may have a common basis in Psychological Abstracts.

IFLA 1983

IFLA Council 1983

Division: Special Libraries

Section: Art Libraries

72-ART-11-E

CéCILE: a bibliographic data base for design at the Pompidou Centre

by

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Centre Georges Pompidou
Paris

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PRESENTED BY Mr. P. RENAUD.

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The Centre de Creation Industrielle (CCI) is one of the four departments of the Centre Georges Pompidou. If the Musee National d'Art Moderne (MNAM), the Bibliotheque Publique d'Information (BPI) and the Institut de Recherches Musicales (IRCAM) are readily identifiable by the public, the uniqueness of the CCI, with its aim of promoting interest in and concern for cultural aspects of the everyday environment, still needs defining, so wide does its scope seem to be. It in fact covers industrial design, urban planning, architecture, visual communication, and the provision of facilities and resources for public and community. It takes culture to be a group of inter-acting relationships between people and what surrounds them: objects, spaces, and signs; the technical, the social, and the symbolic. The objective of the CCI, then, is to encourage people to recognise and take possession of this culture and their own creativity, and this is its role in the Centre Georges Pompidou.

The CCI works by means of exhibitions, publications, a library, a data-base, a slide library, a section for design, a section for social innovation, an advanced technical research studio (Infographie), a section for new technology, and its journal Traverses. It organises discussions, conferences, and film shows in connection with its aims and activities, and in response to current events.

I. The CCI's collection of documents and its users

Created in 1969 by the Union Centrale des Arts Decoratifs in response to the numerous design centres opened in industrialised countries, the CCI quickly established a distinct identity through its objectives, which were not directed towards merely promoting the industrial product, but rather, were concerned with the socio-cultural and economic role of the industrial product in the context of everyday life and the everyday environment. Thus the CCI's collection of documents, acquired since 1973 cover not only design but also architecture and area planning, and visual communication.

The CCI takes an active part in the work of international professional bodies such as ICSID and ICOGRADA. Its documents collection therefore has the distinction of being international in scope, including in large measure studies and research published outside France.

This specialised yet interdisciplinary collection precisely reflects how the CCI and its objectives have evolved.

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The CCI currently has available for public use some 11,000 volumes, 300 journal titles, 30,000 slides, and 130 microfilms of press cuttings in its documents room, which currently receives between 500 and 1,000 visitors every day. Three categories of user can be distinguished: the general public; specialist members of the public, such as students, teachers, designers, architects, planners, journalists, and so forth; and members of the CCI's own staff who may be involved in preparing exhibitions and publications, for example.

II. The project for automating document handling: methods and development

An in-depth analysis of the working of the documentation service at the CCI was made in 1976 with the assistance of the staff concerned. It demonstrated increasing difficulties in document handling, due to the quantity of documents involved and the precise indexing needed to answer the wide range of specific user demands. There was a backlog of documents waiting to be entered into manual files which could no longer be regarded as satisfactory. Furthermore it was felt to be desirable to make data available outside the Centre itself, using modern communication techniques.

To improve the situation, CCI's management decided to extend the study with a view to introducing an automated system. What was needed was the drawing-up of a subject thesaurus, indexing input sheets, and a procedures manual.

The documentation service has twelve staff members assigned to the processing and retrieval of documents on behalf of other staff and the public. A lot of detailed work was undertaken by the indexers on the choice of descriptors based on the existing authority file. The principal restraints arose from the multi-disciplinary scope of the collection, coupled with the need for precise and detailed indexing, and the wide spread between the hierarchical levels. For example:

environment
object
consumer goods
domestic equipment
tableware
crockery
plate.

However, the tendency was to combine the a priori choices method with choice based on the indexing of documents, hence the importance of the indexers who made the choices working together as a group.

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The system was designed to cope with different media. The special requirements of texts, photographs, slides, and films were discussed, in order to establish simple and complete schedules. In addition to indexing contents, these had to give all the elements of normal cataloguing. All these points were incorporated in the indexing manual.

Close cooperation with the staff of the Pompidou Centre's computing section, and use of their Siemens computer and GOLEM software, facilitated the production of a manual of procedures. An interface programme created from the GOLEM software, designed for information retrieval, and from BIKAS software, which is specifically designed for the production of catalogues, had the interesting result of generating ISBD entries automatically (see Appendix 1). In this way the retrieval and interrogation of information and the production of catalogue and index including standard ISBD entries are achieved simultaneously. The setting-up of the system and staff training were facilitated by assistance from a consultant from the Van Dijk Bureau.

The setting-up of the CCIDOC system began in January 1979 and became operational in June 1980 with theinauguration of on-line interrogation at a terminal in the CCI's documentation room. The thesaurus can be consulted on-line. The documents themselves are available on the spot, on open access.

A new stage was completed on 18th February, 1982. The CéCILE data base was included on the Telesystems-Questel network, which ensured that it would be widely used. One of the major objectives had therefore been achieved: to decentralise access to the information and to enable consultation of the CCI's files from afar. It is thanks to the support of the CCI's management, the Board of the Pompidou Centre, and the public authorities, and to the excellent cooperation of the Centre's computer scientists that this project was fulfilled.

III. An examination of the CéCILE bibliographic data base

1. Scope

The CéCILE data base specialises in design - the design of objects and of the everyday environment. Reflecting CCI's approach, it is multidisciplinary and covers design, visual communication, architecture, and area planning. These topics are dealt with in their historical, theoretical, methodological, sociological, professional and cultural aspects.

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The emphasis is very much on the present day, although the 19th and the earlier part of the 20th centuries are well covered (see Appendix 2).

2. Types of documentation

CÉCILE is a multimedia data base. It cites books, report, theses and catalogues; journal articles; microforms; slides; and photographs. The CCI's iconographic collection is in the course of being indexed and integrated into the data base. In response to every search, access is provided to every type of documentation, giving a complete picture of the available information whatever its format. The enquirer may then exclude those types of documentation which are not required.

3. Languages

The data base cites material in any one of fourteen languages. All titles are entered in their original language. The titles of periodical articles are also translated into French. An abstract is given in French. An English translation of the design section of the subject thesaurus is being prepared.

4. Data input

[illegible] acquired by the CCI Library are all processed and integrated into the data base. Periodicals are indexed selectively. An abstract is made for the majority of articles selected, although the contents of books is not summarised. The indexing of the slide collection is under way.

5. Size and updating

There are at present 26,000 entries in the base. It [illegible] produced since 1973, plus all of the CCI's stock with the exception of some items acquired between 1973 and 1979 which are currently being included. The annual growth rate is 8,000 items, of all types. Updating is done monthly.

6. Publications

The classified subject thesaurus, which can be consulted on-line, is also produced in hard copy. The alphabetical thesaurus is available in hard copy (see Appendix 3). A monthly information bulletin is planned for the end of this year.

7. [illegible] documents

All items cited are available on open access in the documentation room of

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the CCI. They cannot be borrowed. Photocopies for educational purposes can be provided on request.

[redacted]

IV. Structure of entries

Searching being possible in the natural language of the text or by preferred descriptors from the thesaurus, the role of indexing is to bring a certain discipline to the search in relation to the wide sweep of free language in the text. Indexing is very specific, employing from as few as 8 to as many as 50 keywords and four different categories: subjects, names of designers and organisations, dates, and geographical location.

1. Fields

Each entry includes an indentification number, followed by a description of its medium (MED) and a location mark (COT). The very simple classification of books and periodicals, allowing the reader direct access to the documents, is strictly adhered to in the data base. These three fields apply to all documents and input sheets.

The author field (AU) contains the names of authors or others responsible for a publication, together with a description of their role (e.g. compiler, editor); it also includes the names of photographers [redacted].

The title field (TI) contains the original title and subtitle, as well as a French translation of titles of periodical articles.

The source field (SO) contains the bibliographic description of an item: the name of its publishers, place and date of publication or, for a periodical, volume and issue number and date of issue (DP), pagination and mention of illustrations and bibliographies.
The language field (LA) indicates the language of the item and of any summaries contained in or provided with it.

The class field (CC) indicates the classification group in which items will in due course be listed in the monthly bulletin of information.

The image field (IM) gives the storage location symbol of an item consisting primarily or entirely of images, on the videodiscs being developed by the CCI.

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The copyright field (DRT) gives the name of holders of copyright of photographs and slides.

The descriptors field (DE) features in all entries. It includes in fixed order the four indexing elements of an item's contents: subject keywords, names of designers and organisations, date, and geographical location. There are on average 8 to 10 descriptors per item, but with as many as 50, as noted above, in some cases.

The abstract field (AB) provides an abstract, produced by the indexer, for most of the periodical articles cited.

These fields which, taken together, constitute the formal structure of the data base, are controlled by means of QUESTEL software, a version of MISTRAL developed by the host, Telesystemes-Questel. The fields are reversed to constitute lexicons, allowing searches from different data (see Appendix 5).

2. Visual display and printing

The results of an on-line search can be displayed on the screen, or printed out onto paper. The different fields are clearly shown, with all the bibliographic detail required to identify each item. The print-out always takes a standard form. On the visual display the results of a search may take various forms - standard, maximum, or selected fields according to the searcher's choice.

V. Access to CéCILE

The CéCILE data base is available through the host, Telesystemes-Questel, on the TRANSPAC and EURONET networks. Notable external users include universities in Paris, Compiegne, London, Montreal, and Vienna; libraries, research centres and business enterprises (RATP, SNCF, IBM, etc).

Training in on-line searching is swift. It can be completed in two days, in courses organised by the host. However, efficient and rapid use of a data base does require a knowledge of the subject and of the data base being interrogated.

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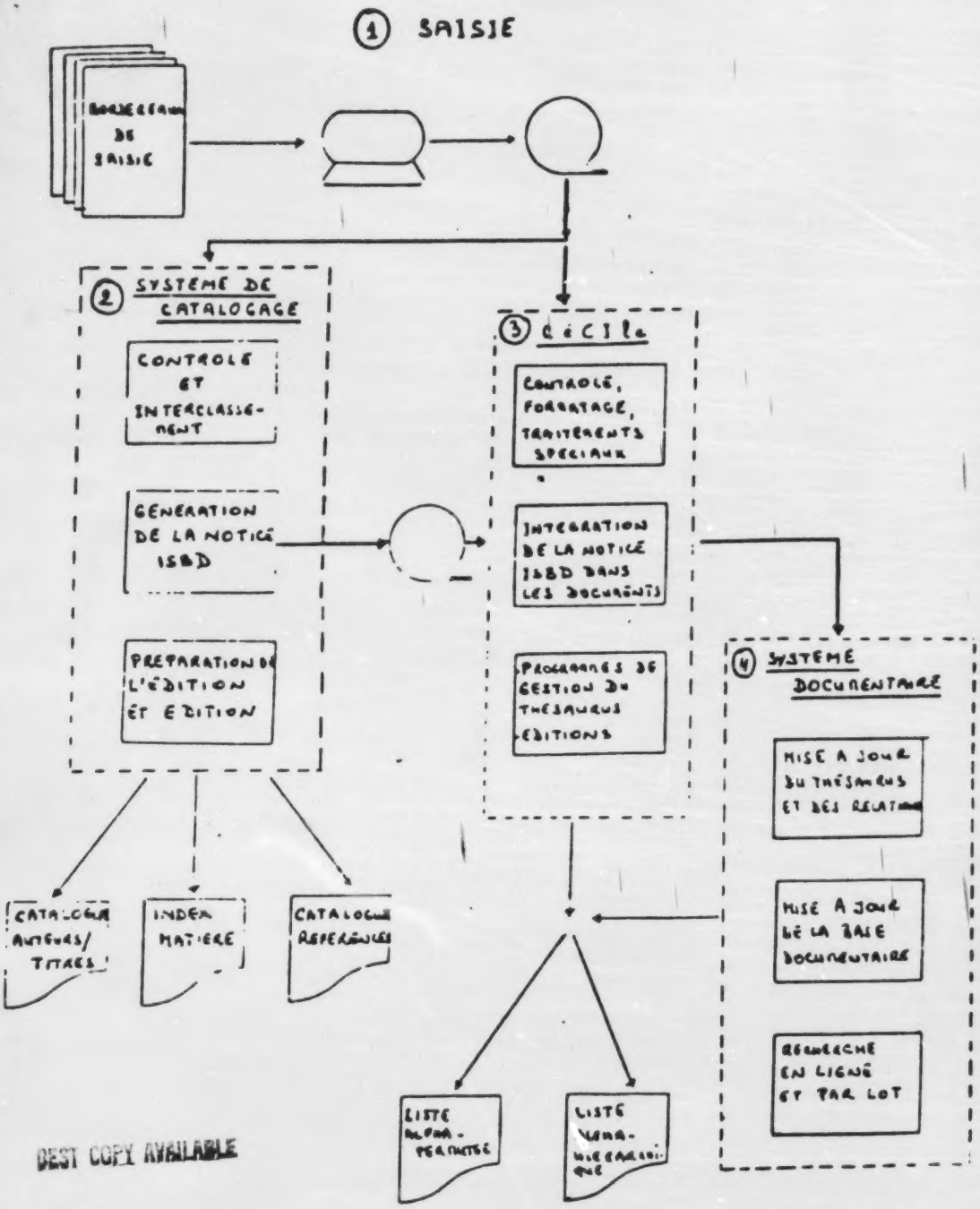
ANNEXE 1

Schéma du traitement informatique


1 SAISIE
BORDEREAUX DE SAISIE
2 SYSTEME DE CATALOGAGE
CONTROLE ET INTERCLASSEMENT
GENERATION DE LA NOTICE ISBD
PREPARATION DE L'EDITION ET EDITION
3 CECILE
CONTROLE, FORMATAGE, TRAITEMENTS SPECIAUX
INTEGRATION DE LA NOTICE ISBD DANS LES DOCUMENTS
PROGRAMMES DE GESTION DU THESAURUS EDITIONS
4 SYSTEME DOCUMENTAIRE
MISE A JOUR DU THESAURUS ET DES RELATIONS
MISE A JOUR DE LA BASE DOCUMENTAIRE
RECHERCHE EN LIGNE ET PAR LOT
CATALOGUE AUTEURS/ TITRES
INDEX MATIERE
CATALOGUE REPERTOIRES
LISTE ALPHABETIQUE
LISTE SYSTEMATIQUE

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ANNEXE 2

DOMAINES COUVERTS PAR LA BASE DE DONNEES CéCIle

LE DESIGN INDUSTRIEL
- Théorie, méthodologie
- Conception des produits
- Histoire des produits et de l'industrie
- Enseignement du design
- Pratique professionnelle du design
- Consommation et usage des produits
- Industrie et énergie

LA COMMUNICATION VISUELLE
- Graphisme
- Théorie, méthodologie
- Histoire du graphisme
- Illustration
- Publicité
- Image de marque
- Signalétique
- Couleur
- Pratique professionnelle du graphisme
- Enseignement du graphisme

L'ARCHITECTURE
- Conception architecturale
- Histoire de l'architecture contemporaine
- Archéologie industrielle
- Recherche et prospective
- Enseignement de l'architecture
- Pratique professionnelle du bâtiment et de l'architecture
- Architecture intérieure

L'AMENAGEMENT DE L'ESPACE
- Environnement
- Urbanisme
- Paysagisme
- Transport
- Equipement

Ces domaines sont traités sous leurs aspects historique, théorique, méthodologique, sociologique, professionnel, culturel. La base est particulièrement orientée vers l'actualité.

ANNEXE 3

Thésaurus alpha-hiérarchique

```
DEMOLITION
   TG     1 CHANTIER
   UP     1 DESTRUCTION
            ECROULEMENT

DEPLACEMENT D'EDIFICE
   TG     1 TRANSPORT
          2  ACTIVITE SOCIALE
   UP     1 TRANSPORT DE BATIMENT

DEPLIANT
   TU     1 EDITION PUBLICITAIRE

DESIGN DE PRODUIT
   TU     1 DESIGN INDUSTRIEL

DESIGN INDUSTRIEL
   UP     1 CREATION INDUSTRIELLE
            DESIGN DE PRODUIT
            ESTHETIQUE INDUSTRIELLE
            STYLISME
   EN     1 ART
            INDUSTRIE
   PA     1 CONCEPTION DU PRODUIT
            ENSEIGNEMENT DU DESIGN
            HISTOIRE DU DESIGN
            METHODOLOGIE EN DESIGN
            PROSPECTIVE EN DESIGN
            RECHERCHE EN DESIGN
            THEORIE DU DESIGN
   AS     1 BIENS DE CONSOMMATION
            EXPOSITION DE DESIGN
            PRODUIT INDUSTRIEL
            SOCIOLOGIE DU DESIGN
   NA     1 VOIR NA
```

Relations :

TG	terme générique
TS	terme spécifique
EN	ensemble
PA	partie
AS	associé
AL	associé libre
UT	utiliser
UP	utilisé pour
S	synonyme
NA	note d'application

Thésaurus alpha-permuté

```
                    VEHICULE AERIEN
                  TRANSPORT AERIEN
                     METRO AERIEN
                PHOTOGRAPHIE AERIENNE
                        VUE AERIENNE
                            AEROGARE
                                  UT : AEROPORT
                            AEROGRAPHIE
                            AEROPORT
                TERMINAL D'AEROPORT
                            AEROSTAT
                  CENTRE D'AFFAIRE
                                  UT : CENTRE ADMINISTRATIF
                            AFFICHE POLITIQUE
                            AFFICHE CULTURELLE
                            AFFICHE
                            AFFICHE TOURISTIQUE
                                  UT : AFFICHE PUBLICITAIRE
                            AFFICHE SPORTIVE
                            AFFICHE SOCIALE
                            AFFICHE PUBLICITAIRE
        HABITAT DU TROISIEME AGE
                  TROISIEME AGE
                            AGENCE DE PUBLICITE
                            AGENCE D'ARCHITECTURE(NOM)
                                  UT : ARCHITECTE(NOM)
                            AGENCE D'ARCHITECTURE
```

ANNEXE 4

Exemple d'édition du Catalogue Auteurs et Anonymes

>P.AME<

Aaron, J-C. :

Quel habitat demain ? / J-C. Aaron
In : 2000, F ; n° 42, 7801-0300, p. 43-45, ill., français

Interview d'un promoteur immobilier, Jean-Claude Aaron sur l'habitat de demain. Analyse de l'évolution actuelle qui tend à privilégier l'habitat individuel et des facteurs socio-économiques qui déterminent les solutions possibles pour l'avenir.

bâtiment d'habitation collectif/bâtiment d'habitation individuel/futurologie/habitat urbain/prospective architecturale/urbanisme * France
C0029064T8

>P.PRO<

L'Abitazione di un architetto [= L'habitation d'un architecte]
In : Abitare, I ; n° 167, 780900, p. 32-39, ill., italien, français

Présentation d'un pavillon caractéristique de l'architecture moderne de 1935. Pilotis et angles droits étaient alors de rigueur. La patine du temps et la végétation environnante donnent à cet édifice un charme nouveau confirmant la pérennité de son style.

architecte(nom)<1>/bâtiment d'habitation individuel/espace vécu/histoire de l'architecture/pilotis * 1935 * Italie/Milan * Figini (Luigi)<1>
C0027304T1

>PRO.05.009598<

Adburgham, Alison :

Yesterday's Shopping : The Army and Navy Stores catalogue 1907 / Alison Adburgham. - Devon : David & Charles Reprints, 1980. - 1281 p. : ill. ; 26 cm anglais.
A Facsimile of the Army & Navy Co-operative Society's 1907 issue of Rules of the society and Price List of Articles sold at the Stores.

arme/article de toilette/article de voyage/bijou/catalogue commercial/équipement domestique/horloge/jouet/luminaire/matériel de bureau/matériel de dessin/matériel de sport/matériel médical/mobilier/orfèvrerie/outillage/produit industriel/vaisselle/vêtement * 1907
C0091446T7

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ANNEXE 5

Champs et lexiques

RECHERCHE SUR LEXIQUES ET SOUS LEXIQUES

LEXIQUES	SOUS LEXIQUES	CONSEILS ET INFORMATIONS	EXEMPLES
/BI lexique de base implicite	/UT uniterme	unitermes des : titres (TI) descripteurs (DE) résumés (AB)	POLITIQUE ET DESIGN GLASER 1979
	/DE descripteur	descripteurs : matière	POLITIQUE DU DESIGN SOCIOLOGIE /DE
		géographique	SAN FRANCISCO
		noms propres de concepteurs et d'organismes cités	GLASER MILTON
		date citée	1979 /DE
/CC code de classification	-		DESIGN INDUSTRIEL /CC
/AU auteur (personne physique)	-	sous la forme : NOM prénom en entier ou NOM initiales des prénoms	HAJJ ED /AU BUTTER N. /AU
/AM auteur (personne morale)	-	sous forme de mots simples	soit CABINET /AM ET RICHARD /AM ET ARCHITECTES /AM soit /AM CABINET ET RICHARD ET ARCHITECTES
/SO source	/JT titre du périodique	interrogation sous forme de mots simples sur le titre du périodique et le pays	soit INDUSTRIAL /JT ET DESIGN /JT ET US /JT soit /JT INDUSTRIAL ET DESIGN ET US
	/DP date de publication	sous la forme : AAAA/MM/JJ AAAA/MM AAAA	1979/07/12 /DP 1979/07 /DP 1979 /DP
	/ED éditeur	interrogation sous forme de mots simples sur le nom de l'éditeur et la ville d'edition	soit BIBLIOTHEQUE /ED ET ARTS /ED ET PARIS /ED soit /ED BIBLIOTHEQUE ET ARTS ET PARIS
		il est possible d'interroger tout le lexique	/SO BIBLIOTHEQUE ET ARTS ET PARIS ET 1968
/MED media	-		TEXTE /MED
/LA langue	-	intitulé en clair	FRANCAIS /LA
/DRT droit (pour les photos)	-	nom de la personne ou de l'organisme détenteur des droits de reproduction des documents	sera dans la base prochainement

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FORMATS D'EDITION

FORMATS/CHAMPS	NO	TI	AU	DRT	MED	SO	LOC	COT	LA	AB	CC	DE
STDR	X	X	X	X		X	X	X				X
MAX	X	X	X	X	X	X	X	X	X	X	X	X
TEST		X										X

ANNEXE 6

Exemple de recherche au terminal et de sortie sur copieur d'écran

```
?HISTOIRE DU DESIGN ET (GRANDE-BRETAGNE OU FRANCE)

  >4> RESULTAT     39
  COMMANDE, OU ETAPE DE RECHERCHE  5


  -1- 21118 C.CCI
  NO  : 8970TX
  TI  : LE DESIGN A-T-IL UN AVENIR EN FRANCE ?
  AU  : DANNI FRANCOIS
  SO  : ARCHITECTURE INTERIEURE - CREE (F); NO 187/8202-0300 (P. 54-57; ILL.)
  CDT : P.ARC
  DE  : DESIGN INDUSTRIEL; DESIGNER INDUSTRIEL; FONCTION; FORME; HISTOIRE DU
        DESIGN; OBJET; PRODUIT INDUSTRIEL; PROFESSION; SOCIOLOGIE DU DESIGN;
        FRANCE

  -2- 20809 C.CCI
  NO  : 8684TX
  TI  : CLASSICS OF MODERN DESIGN
  AU  : [EXPOSITION LONDON. CAMDEN ARTS CENTRE, 1977]; GAY BERNARD PREF.
  SO  : LONDON : ARKWRIGHT ARTS TRUST, 1977
  CDT : PPO.08.000223
  DE  : EQUIPEMENT DOMESTIQUE; HISTOIRE DU DESIGN; MOBILIER D'HABITATION;
        GRANDE-BRETAGNE
        - EXPOSITION DE DESIGN; 1977; LONDRES


-9- 18606 C.CCI
  NO  : 67TX
  TI  : DESIGN 1920 ( ) : MODERNISM IN THE DECORATIVE ARTS , PARIS 1910-30 ,
        GERMAN DESIGN AND THE BAUHAUS 1925-1932)
  AU  : THE OPEN UNIVERSITY; BENTON TIM; BENTON CHARLOTTE; SCHARF ARON
  SO  : LONDON : OPEN UNIVERSITY PRESS, 1975
  CDT : PPO.08.000222
  DE  : ANNEES VINGT; ART DECORATIF; DESIGN INDUSTRIEL; ENSEIGNEMENT DU DESIGN;
        ENSEIGNEMENT DE L'ARCHITECTURE; HISTOIRE DE L'ART; HISTOIRE DE
        L'ARCHITECTURE; HISTOIRE DU DESIGN; HISTOIRE DU PRODUIT; MOBILIER
        D'HABITATION; SIEGE; VAISSELLE; ART NOUVEAU; BAUHAUS; WERKBUND; 1925-
```

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IFLA GENERAL CONFERENCE MUNICH 1983

Division: Special Libraries

Section: Art Libraries

136-SEM-ART-14-

Systeme descriptif des representations

par

Francois GARNIER

Institut de Recherche et d'Histoire des Textes (C.N.R.S)

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SYSTEME DESCRIPTIF DES REPRESENTATIONS

par François GARNIER

Institut de Recherche et d'Histoire des Textes (C.N.R.S.)

Historique

Le système descriptif des représentations que je présente a été entrepris en 1976, à la demande du Ministère de la Culture, pour l'Inventaire Général et les Musées de France. Il est destiné à l'analyse et au traitement informatique de toutes les représentations, quelles que soient la nature de leur support, la technique de leur exécution, leur qualité et leur destination. Ce système descriptif unique servira à gérer la masse des figurations très variées crées aux différents âges de l'histoire. Il permettra à toutes les catégories d'utilisateurs d'avoir accès à la documentation.

Ce Système descriptif des représentations est le résultat d'une réflexion théorique et d'une expérimentation. Il a été élaboré progressivement, à partir d'une vision rationnelle de tous les aspects que peuvent prendre les activités des hommes et leur perception du monde extérieur. L'expérience acquise par le traitement d'une masse assez importante de documents a permis d'assouplir et d'adapter le système. Il a été tenu compte des exigences spécifiques de la matière traitée, de la recherche historique, en particulier de l'histoire de l'art, et des caractères propres au langage documentaire. Une collaboration constante avec les personnes responsables du Service informatique du Ministère de la Culture a permis d'améliorer la structure et le contenu du lexique, à partir d'applications faites à des dizaines de milliers de peintures, de sculptures et de dessins conservés dans les musées de France. Pendant que s'effectuaient ces

mises au point dans des travaux concrets, la réflexion théorique se poursuivait, en particulier avec les chercheurs de l'Inventaire Général, dont les activités s'étendent à toutes les formes de représentations.

Le Système descriptif des représentations tel que je vous le présente aujourd'hui est donc le fruit d'un travail dont les options ont été dictées par l'efficacité.

Publication du Système descriptif des représentations en 1983

Le Système descriptif des représentations a fait l'objet d'un tirage d'environ trois cents exemplaires, destinés aux services du Ministère, en juillet 1981. Cette édition à usage interne était illustrée d'encviron 250 gravures. Il a semblé en effet indispensable d'accompagner le lexique d'exemples qui permettent de comprendre l'utilisation correcte des descripteurs et de la syntaxe.

Une publication pour la grande diffusion est prévue pour le dernier trimestre de cette année 1983. Le nombre des reproductions analysées sera augmenté. Des planches hors-texte présenteront des documents variés, peintures, sculptures et photographies, empruntées à plus de mille ans d'histoire.

PRESENTATION DU THESAURUS

Le lexique iconographique est destiné à l'analyse et au traitement informatique de toutes les représentations, qu'elles constituent en elles-mêmes des oeuvres d'art ou qu'elles décorent des objets. La masse documentaire virtuelle est donc considérable et variée. La gamme des utilisateurs potentiels, de leurs besoins et de leurs exigences, est elle-même

étendue et ouverte. En tant qu'instrujment de travail universel, ce lexique doit tenir compte d'un ensemble d'impératifs quelquefois difficilement conciliables. Après avoir présenté l'objet, la nature et la structure du Système descriptif des représentations, il conviendra donc d'exposer les principes directeurs qui ont déterminé le contenu et la forme de cet instrument de travail.

Objet : la signification

Deux préoccupations principales peuvent inspirer la description iconographique des représentations et l'orienter dans des voies divergentes.

L'étude des compositions et de formes conduit à faire une histoire des représentations considérées en tant que créations artistiques. Elle privilégie les oeuvres de haute qualité, meilleurs témoins des inventions, des influences et des évolutions qu'elle décèle, cerne et explique. Elle répond aux principales exigences de l'histoire de l'art.

L'étude de la signification explicite le contenu des représentations sans accorder d'attention particulière aux caractères spécifiquement artistiques. Elle fait l'inventaire des éléments et des relations figurés pour dégager par synthèse la signification principale de l'image, accompagnée éventuellement de significations secondaires. Elle cherche à lire et comprendre la représentation pour la mettre au service de l'histoire générale, de la connaissance universelle.

Le système descriptif des représentations s'ouvre dans la perspective la plus large, donc en fonction de la seconde orientation. Son objet principal est de rendre compte du contenu de la représentation qu'il traite comme un document d'intéret général. Mais loin de s'opposer ou de s'exclure, les différents aspects de l'iconographie se complètent. On a essayé de faire en sorte que la priorité accordée aux significations ne conduise

pas à éliminer les informations utiles à des recherches spécifiques, en particulier celles de l'histoire de l'art. On a, par exemple, introduit dans le dictionnaire les équivalences qui permettent d'interroger sur des genres traditionnels, comme "marine" ou "scène de genre", que le langage documentaire ne pouvait retenir sous leur forme usuelle.

Nature : un système documentaire

Le Système descriptif des représentations est destiné à la recherche documentaire. Il ne faut pas le confondre avec un système de traitement, établi par des spécialistes qui utilisent une terminologie scientifiquement élaborée et des relations spécifiques, pour une étude dont l'objet est précis et limité.

Le langage documentaire doit être aussi simple que possible. Chaque terme ou descripteur ne peut être pris que dans un sens. La position d'un spécifique sous un générique, dans une hiérarchie, détermine sa signification. S'il y a lieu, une note précise l'acception du mot-clé. La nécessité d'éviter les homonymies conduit à introduire dans le thésaurus des synonymes qui évitent les confusions.

Les mots-clés peuvent être combinés entre eux par l'utilisation de différents séparateurs : séparateur de paragraphe, séparateur de phrase, séparateur de mots-clés à l'intérieur des parenthèses, les patrenthèses signifiant que les mots-clés qu'elles contiennent se rapportent au mot-clé qui précède la parenthèse ouvrante.

La combinaison des mots-clés et l'utilisation des relations, qu'il n'est pas possible d'étudier plus longuement ici, permet d'établir la description de la représentation sous une forme qui facilite les interrogations variées.

Structure

Les mots-clés qui servent à la description des représentations sont répartis en quatre catégories, dont l'importance relative est inégale.

La première catégorie, codée 1070 dans la grille de saisie du Ministère de la Culture français, sert à traduire le contenu essentiel de la représentation. Les trois autres précisent soit des particulatités propres à certains sujets, soit la source écrite de la représentation, soit la date de l'événement figuré.

La première catégorie contient l'ensemble des termes nécessaires pour la description des représentations. Elle se compose de deux lexiques complémentaires. Cette division correspond à une distinction fondamentale.

Le LEXIQUE DES THEMES sert à la description du contenu des représentations dont la signification est générale, c'est à dire concerne la vie humaine, son cadre et ses manifestations, indépendamment de toute singularité événementielle. Très structuré et hiérarchisé, il doit permettre de traduire les principales significations à l'aide d'un nombre limité de descripteurs, grâce aux combinaisons de mots-clés et aux liaisons syntaxiques. Le lexique des thèmes est fermé.

Le LEXIQUE DES SUJETS sert à l'identification des éléments particuliers des représentations. Il s'agit des figurations situées historiquement et géographiquement. Les lieux et les personnes, les événements réels ou imaginaires et des faits sociaux liés à des institutions relèvent d'un vocabulaire propre. Le lexique des sujets est organise et hiérarchisé. La plupart des classes du lexique des sujets sont ouvertes et s'enrichissent au fur et à mesure que sont traités de nouveaux documents.

STRUCTURE DU SYSTEME DESCRIPTIF

DESCRIPTION DE LA REPRESENTATION

Première partie : LES THEMES

1 - Genre iconographique
2 - Nature
3 - Le corps et la vie matérielle
4 - Vie psychologique et morale
5 - Société et vie sociale
6 - Vie publique
7 - Vie militaire
8 - Agriculture
9 - Artisanat et industrie ; commerce et services
10 - Transports et communications
11 - Vie intellectuelle et scientifique
12 - Arts et spectacles
13 - Vie religieuse
14 - Etre imaginaires

Deuxième partie : LES SUJETS

Géographie
Histoire
- nom historique
  - noms et sujets bibliques
  - noms mythologiques
  - personnages historiques
    - saints
    - papes
    - souverains
    - "quidam"
  - personnage imaginaire
- noms de groupes de personnes
  - nationalités et groupes ethniques
  - décorations
  - ordres religieux
  - associations

périodisation
- périodes historiques
- périodisation des objets
- calendrier des fêtes

COMPLEMENTS PARTICULIERS AUX SUJETS

SOURCES ECRITES

DATATION DE LA REPRESENTATION

Index alphabétique général, avec équivalences et renvois

PRINCIPES DIRECTEURS

La nature et la structure du Système descriptif des représentations résultent de choix importants. Les principes directeurs que l'on va examiner rapidement proposent des impératifs et des prescriptions dont le respect intégral constitue un idéal difficile à atteindre. Ils ont néanmoins déterminé - et justifié je lk'espère - les options qui ont donné au système descriptif sa forme actuelle.

Un système universel

Longtemps les représentations se sont réparties en deux catégories par le jeu des valeurs et la loi des durées. Les unes, conçues et exécutées pour elles-mêmes, somptueuses par nature, étaient destinées à commémorer les événements et les hommes qu'elles figuraient, à exalter un idéal ou à édifier des foules. Leur étude relève depuis longtemps d'une histoire de l'art qui, comme son nom l'indique, se préoccupe de déterminer, dans une chronologie et une géographie historique strictes, tout ce qui concerne les oeuvres d'art, leurs auteurs, les influences, les évolutions techniques et stylistiques.

D'autres représentations, liées au développement de la vie concrète la plus banale, sont apparues et ont quelquefois presque disparu sans qu'on leur porte une particulière attention. Fruits d'un besoin momentané, nées dans l'instant, elles ne lui ont que rarement survécu. Telles sont les imageries décorant des objets utilitaires, des prospectus, des affiches, des menus, des publications de circonstance.

Aujourd'hui, grâce aux techniques de photographie et de reproduction de toutes natures, le nombre et la diversité des représentations s'accroissent selon des coefficients que nul n'est capable d'apprécier. En même

temps, les horizons de la recherche s'élargissent, les besoins des utilisateurs se diversifient. Les moyens d'exploitation de la documentation créent de nouveaux intérêts et de nouvelles disciplines, au fur et à mesure qu'ils se perfectionnent. Cette vitalité et ce dynamisme du couple documentation - gestion automatisée constituent la réalité fondamentale à laquelle doit se référer en permanence l'établissement d'un système informatique de description des représentations. On peut tenter de résumer en quelques formules les principaux impératifs qu'impliquent l'extension des documentations, des possibilités d'exploitation et des besoins.

Conserver les notions acquises

Un système descriptif des représentations ne doit négliger ni abandonner aucun des aspects des recherches antérieures. Il importe en particulier que les notions et les problèmes traditionnels de l'histoire de l'art non seulement ne soient pas écartés mais encore profitent des nouveaux moyens d'analyse. Lorsqu'on parle des notions et des problèmes, il s'agit des réalités et non des appellations. Le langage documentaire a ses exigences, qui se traduisent autant dans les formulations que dans les structures du discours descriptif. L'important pour le chercheur est de recevoir, après une interrogation bien conduite, l'ensemble des documents pertinents répondant à sa question.

Traiter toutes les formes d'expression figurée

Un système descriptif des représentations doit couvrir la totalité des champs de la documentation figurée. Il s'agit aussi bien des peintures (tableaux, peintures murales, peintures des manuscrits), que des sculptures, des vitraux, des émaux, des estampes, des gravures illusttrant les livres etc... La qualité technique et stylistique n'entre pas en ligne de compte.

L'histoire moderne ne peut plus travailler sur des échantillons déterminés par le goût ou le hasard. Elle prend en charge l'ensemble des manifestations de la créativité, dans la diversité des milieux et des moyens, qu'il s'agisse d'art savant ou d'art populaire, de chef d'oeuvre ou non. Les masses doicumentaires étudiées par les chercheurs se sont comptées successivement par milliers, puis par dizaines et par centaines de mille. On s'intéresse aujourd'hui à des millions d'images. Dans cette masse, il existe des secteurs très spécialisés qui présentent des exigences spécifiques. Il en résulte quelques impératifs, plus ou moins contradictoires en apparence, dont un système descriptif des représentations doit tenter de résoudre les antinomies.

Prendre en compte les différents contenus des représentations

Le système descriptif des représentations doit recouvrir tous les aspects de l'univers et de la vie des hommes. Les éléments et les relations dont le jeu continu constitue le devenir historique sont de deux natures. Les uns, constants et permanents, forment la trame même de la vie, quels que soient les contextes culturels, quelles que soient les personnalités dans lesquelles ils s'incarnent. La bienveillance et l'agressivité, les besoins du corps et de l'esprit, les activités de création et de divertissement peuvent se décrire à l'aide d'un nombre limité de termes. Ces mots-clés sont regroupés dans le lexique des thèmes. Les descripteurs particuliers, les noms de lieux et de personnes, constituent, comme on l'a déjà vu, le lexique des sujets.

Un instrument pratique et efficace

Le Système descriptif des représentations est un instrument de travail. Il doit être pratique. Son universalité ne doit pas se traduire

par un développement excessif des hiérarchies, avec multiplication inconsidérée des sous-descripteurs. En effet, si par souci de précision et d'exhaustivité on s'engageait dans la constitution de dictionnaires spécialisés, de véritables index des termes de la marine, de l'automobile, des sports, de la biologie etc... On aboutirait à la rédaction de catalogues automatisés analogues à ceux qui permettent de gérer un stock de pièces automobiles ou de marchandises. Il serait impossible à partir d'un tel instrument, très lourd mais cependant le plus souvent incomplet et inadéquat, de poser des questions intelligentes débouchant sur des recherches nouvelles. Quant aux difficultés résultant des synonymies et des homonymies, il est préférable de n'y pas songer !

Il nous apparait donc que seul un système fortement organisé et hiérarchisé, utilisant un minimum de descripteurs mais enrichissant ses possibilités d'analyse et de précision par une syntaxe adaptée, permet de dominer des masses documentaires importantes et variées. Il sera toujours possible à une entreprise dont la documentation est vraiment spécialisée de développer des hiérarchies en les "branchant" sur les descripteurs du système principal. Des systèmes spécifiques doivent pouvoir s'articuler sur le système universel relativement léger, le rattachement et l'accroissement étant contrôlés par l'organisme de gestion du système descriptif des représentations.

Les intérêts d'une telle structure, admettant des niveaux complémentaires, sont multiples : le système général n'est pas alourdi par une terminologie trop précise que seuls les spécialistes d'une discipline peuvent dominer. Cela évite des notations aberrantes. D'autres part, en interrogeant les bases de données établies par des analystes ayant une formation générale. les spécialistes peuvent regrouper tous les documents

relevant de leur discipline et en affiner le traitement si besoin est. Une base documentaire est vivante. Elle ne s'accroit pas seulement en valeur numérique. Les recherches qu'elle facilite lui permettent en retour de s'enrichir qualitativement.

Sur un autre plan, un système qui s'efforcerait de répondre par avance à toutes les demandes en multipliant les séries de descripteurs très fins porterait toutes les tares de la conception à priori : ses développements reposeraient sur des usages et des théories d'autant plus rapidement caducs qu'ils seraient "pointus" et récents. L'encombrement rendrait le travail d'analyse et d'interrogation fort difficile. A la limite, un système dont la richesse tient au nombre des éléments constitutifs devient un instrument non intelligent. On ne peut en effet procéder à l'établissement de relations nuancées et précises, à l'aide d'une syntaxe claire et rigoureuse , sans encourir des risques graves de confusion, d'ambiguité, de silences et de bruits, dus aux synonymes, aux homonymes, aux variations de compréhension et d'extension des concepts.

Un système descriptif répondant aux presciptions enoncées est nécessairement complexe. La fécondité et le rendement de cet instrument de travail dépendent de la façon dont sont conduites les analyses et les interrogations. Dans ce langage docvumentaire, la syntaxe est aussi importante que la structure et la morphologie. Une connaissance approfondie du système est indispensable à sa bonne utilisation.

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ART

Universal accessibility of art images and information technology

by

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UNIVERSAL ACCESSIBILITY OF ART IMAGES AND INFORMATION TECHNOLOGY

While the main core of world literature is accessible in mainly official editions, carefully and critically related to the original version, there do not exist neither any corpus, nor any virtual possibility systematically to get access to any major and recognized art work even in just acceptable reproductions. Of course, there are always means to find at least most of the well-known works in most major libraries. But anyone active in the field of art historiy research knows that this is only a relative truth: even in a specialised art library of the very first order, we will always have to give up for the moment our desire to make direct references and comparisions with some important art works while we are most eagerly needing one. This has become part of our conditions, and we have perhaps not told the authorities, nor our allied in the libraries and the publishing activities to what degree this is an obstacle for more refined results in a comparative art research discipline.

But not only to forther art research there is a need for a system of universal accessibility for the major art works by means of some system of acceptable reproductions: it is of course primarily a question of immediate cultural needs. When it happens that one in a library can get access to almost any picture at the moment, almost, when the desire to see it appears, then there is a new situation for the art in culture, and the specific advantage of immediate recognition of a picture - as compared to the more time-consuming procedure of absorbing the features of a literary of musical work - would probably make for a far more active part of art in the everyday cultural activities of individuals.

There have been series of books with profuse colour illustrations coming out since the end of the second world war - the Skira series for instance - and as long there have been controversies over the more or less untruthful colours which - it must be said - even more in our days tend to be utilised as a selling argument for many books, by being made as "delicious" and forceful as possible, no matter how the original look. The long series of illustrated Epoch books have had their advantages, but not least their shortcomings and harmful effects. First, by covering just the most conventionally topical areas, they may have contributed to a conventionalisation of what is "important" art and what can be overlooks without harm. Secondly, by proposing constantly the most glorious colours and the most spectacular parts of many major works (wall-paintings for instance) they have contributed to a

generalized false understanding of many works. Cutting out parts of masterpieces once meant vitalizing details - having become a mode this feature contributes to a nedlect for alternative aspects. And in pictorial art, alternative aspects are not only important, they are constitutive for what we can mean with art. The more we learn to scan art works for some "main meaning" or "most important feature", the more we contribute to the death of art. Finally, the false colours of the most art book series - I talk about the more or less voluntarily false colours, the acceptance of untruthfulness to the favour of glamour - should be considered as harmful as is erroneous language in literature.

Since more than ten years, there have been new means for mass registration of art works under development, and in the last few years there seems to have been a certain maturation of those means, so that it will be possible to discern which method might be good for what. Theres is the disc regustration which can contain tens of thousands of pictures - but which must be stored once and forever, as a principle. And there is the microfiche, the individual item of which of course also has to be produced in one move, but which can form a cumulative system with great flexibility. There of course is also the possibility of a universal system of slides - which would be immensely expensive even if it had to be produced without the precautions for quality which should be demanded in that case.

I am not pretending to be able to discern which system is the best one from the crucial point of view of reproduction quality. There has been an extensive discussion on this topic. The few enterprises active in preparing for a more or less universal system for art work communication have not shown too much eagerness to leave out the crucial questions of quality for a general discussion, and the proof series already issued have to a major extent been so chosen that the possible weakness of the reproduction method do not appear clearly. Anybody in the field knows, that no matter the possibilities of a medium, the real level of quality will be dependent of the routines for surveillance and checking of qualities which can be maintained in the production. And as far as our present experiences can advise us, mass production today in this area means imminent risks of a break-down of a serious quality control just because of the fact that "flattering qualities" in the reproductions in themselves still seem to prevail as a selling argument in too many cases.

So when now I am going to discuss the necessity and the possibilities of a universal system of art works documentation, I do not start with affirming any definitive stand in the question of which procedure to favour. On the other hand, there is a need for a model, a discernible practical possibility, otherwise the problem would remain too abstract. And personally, I am rather convinced that microfiches is the most convenient means in the present situation. But say, that electronic discs for picture storing would turn out to be the final answer: in both cases there is a common conclusion: We

would not be able to do without a complementary system of reproductions, and there is no alternative to slides in this case. The only and crucial question is: to what extent must slides be available for each picture, and should they be produced as originals - dwindling idea for a universal system! - or could we do with systems of duplicates? Those questions should be discussed seriously, and they are among such questions which in my wiew demonstrate the necessity of an international commission for a continuous and scrupulous penetration of the whole problem, while it is still accessible for remedies. Once the market really started, we will have reluctantly to considered what we had been able to forward and what we would have been able to avoid - some years ago. I am personally afraid of that situation, it does not contain much satisfaction and does not contribute to make the profession of art historiens more profitable for a general culture.

Now to the concrete issue! It would be possible, in my view, to organise a continuously rolling system of registering and producing in the form of microfiche as well as individual restricted systems of slide references, covering what we consider to be world art. Rolling in this case of couse not only would mean that we would have to allow for several decades of continuous production before having something lika a universal system, but also allowing new areas and groups of art into the concept of "world art" as a concequence of scholarly development and taste changes. Such a system is desirable, and it should be realised on such a level of costs that there would be realistic means for keeping several complete systems in each country, many sets for major countries - and rich selections for almost any major library and museum.

One condition for such a system really to work in a constructive way, must be that looking facilities are around and accessible to any visitor. This is evident, but it cannot be sufficiently stressed that those facilities must be more than just acceptable for the projection of art works. There shoud be no distortion of colours neither of proportions of course.

And the second condition for such a system really to work is in my view the existance of slide collections in direct relation to the micro-fiche system. There is no possibility for a microfich satisfactorily to convey more than just some of the most conspicuous qualities of the original. In slides we can obtain more, and at best also a relatively trustworthy colour rendering. It is not possible to dispose as many slide systems as micro-fiche systems, but there should be a calculated relation between the latter and the former: it must be possible for any serious student without much spill of time to get access to a slide reproduction of an item already studied in microfiche. If we give up this link, there is a real danger that the microfiches will contribute to a culturally disastrous levelling of the understanding and expectations related to art in most people - and to the neglect of major artistic qualities.

But the scheme here could not be delivered without one former observation: the microfiches as well as the slides must constantly refer to the originals! I do not doubt that the fact that we dispose rich systems for reproductions in-

evitably changes the way many and probably most people use and look upon pictorial art. Already Malraux noticed the change following with a satisfactory system of colour-reproductions (in his time, it was the prestations of Cahiers d'art and Verve which gave the basis for his admiration and his ideas about pictorial art becoming everybodys possession at home). He maybe never got time for a final considering of the risks of leaving the originals outside our horizon of cultural realities, referring them to a fate as prototypes which should be kept well stored in order to serve as basis for new editions of reproductions. No, when distributing microfiche encoclopoedias we must take upon ourselves also the task of keeping the lines between reproductions and originals open and of efficiently showing the perspective to the public.

This is no doubt a cultural necessity: the originals in their settings and even in their museums offer sensations - and experiental conditions - which are not at hand in front of the monitor. But it is also a necessity of critical scholarship: only the original - under good conditions - can tell the truth, while the colour slides - also under good conditions - can convey parts of the truth in a trustworthy way. While, finally the microfiche at least can do better than the majority of present colour reproductions, at least by not beeing more or less willingly biased. This chain should always be kept in mind. Reference to the physical existence, and the accessibility, of any original should never be omitted in relation to any system of reproduction.

The basis for a cumulative system of projective reproductions of art must be the art museums - and the national and regional authorities for the protection and conservation of the cultural heritage. There is no possibility of mounting any general system without having this basis well prepared - and there might be no other possibility to obtain a continuous collaboration in this respect than the UNESCO.

The other partner(s) in the business must of couse be the editing enterprise, be it one or several private establishments, or some other organism. For the present, the technical resources are in the hands of private enterprise,even if there are many affiliations between them and the museums and universities. Mounting a projekt for a future universal system of projective reproductions must mean to find a solid basis of collaboration lasting for decades without changed preconditions. Forming guarantees for such a production basis of course demands for a powerful, resourceful and unquestioned authority on the side of the responsibles for the general idea. There is no question whether or not the museums must be involved in a very substantial way in this responsibility and this authorithy: tehy hold as well a major part of the material as a substantial part of the theoretical and practical knowledge and survey needed for this. But it is equally obvious that the matter will concern libraries as much as museums, and moreover the ways of keeping the material accesible and

to bring it to the public will demand for as much library competence as museum competence. Therefore as well specialised art libraries as general libraries should be represented in the preparatory work. Finally, it is necessary that the art competence is represented by the most well-established expertise, which means that not only museums, but also the entire body of art historians should be considered for collecting the needed expertise in this preparatory work.

To sum up, I propose that the future development in the area of universal documentation of art be put under the responsibility of an actively working international group, which is given a budget and defined guidelines for the work, preferably from an existing international authority, which should be approached within not too long time from now.

In the selection of material to be considered for such a system, it is necessary that the general scheme is subdivided, so that priority is given for defined groups of material. If those groups would be about the same as the most conventionally defined "world masterpieces of art", this might be as good as anything. On the other hand, there will soon be problems concerning the boarderlines to be defined netween say ethnology and art, and between art and architecture, etc. It is conceivable that parallell projects will come forth for ethnology and cultural history, and it would be favourable if such ideas oould be discussed in common between the responsible grups already in the beginning. Concerning architecture, there are specific groups of interested which are not common with those just interested in pictorial arts, and it should from the beginning be defined whether or not a general scheme should comprise architecture, and if so, under what conditions. Documenting spatial aspects in depth, and documenting technological aspects - is this a matter for a general art documentation program? This is not to say that we could accept a program for documentation of art which does not comprise architecture or at least can lean towards a satisfactory system of documenting architecture - only to point at the problems of delimitation and of collaboration over given or decided limits.

To sum up: it is high time to take up the question of pictorial documentation of art on a level of principle and in a perspective of completeness, as far as possible. The discussion must soon reach and be taken care of by responsible groups which can form a working theme, and put under the authority of international organisation. The problems of principle for as well collecting materials as finding the appropriate carrier of this dcumentation must be substantially discussed, the problems of distribution of responsibility as well as the means for linking different kindred and/or corresponding areas into a more universal coverage of cultural heritage and creation must be given attention and find solutions. All this must happen before the market itself finds its ways, before we are in the presence of most probably several unrelated systems

and still worse ways of conceiving of the entire matter. Because, once the market has really opened up with massive productions of say microfiche systems - and this is just now under way - the case is lost for scholarly planning and for overall educational and cultural intentions.

What happens now is that major museums collaborate in microfiche and disc editions of selected parts of their collections, and the selection follows as far as I have been able to see two different principles: the one is that of general publishing policy on the market: to show the most exquisite and the most demanded for collections or groups of artistic material. The second is that of making microfiches etc from those types of pictures which betray the weaknesses in the present system or equipment for production. Both strategies converge in a production with clear tendency, and towards a medium-bound editing policy. With the time, such a production must help in making us use reproductions more or less totally disconnected from the mere idea of the originals. We know that this is something which happens frequently already with usual colour slide programs and their utilisation: selecting the brightest,most contrasted, most brilliant items for sale, even museums contribute to create the idea in the spectator that stained glass, indeed, is the most eminently painterly technique and that any painting should strive against the goal of looking like a window in the cathedral of Chartres. And I think that this disconnection of the document from that which they are documenting is a primary concern for archival specialists, seen as those who take care of our real long term interests in the area of documentation of the past for the future.

Thus, I am glad to have been able to deliver this short text to the right forum. I do not represent any major body of specialists which could in itself take the initiative of demanding the coming about of an international collaboration and a specific work for the objectives just exposed. It is true that I have been for some twelwe years responsible of the documentatin activities of the International Association of Art Critics, and that with my friend Dr Hans-Jörg Heusser, here present, who has that task at present, I am very much interested in this scheme to be started. But as I see it, there is no organisation or group so well placed and entitled for an initiative as the IFLA, both because of its archive coverage and for its coverage of the libraries of art. This is why I hope that your organisation will take up my proposals for a discussions, to see what could be done, and maybe also to some degree scrutinize the problems of how things should be done. I am aware of the fact that such a discussion might demand for a great variety of information and insights, but I am also confident that quite much of this is represented here.

Sven Sandström

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Art Libraries in the Federal Republic of Germany

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Art Libraries in the Federal Republic of Germany

At Mr. Philip Pacey's suggestion, I shall try to give you insight into some current issues of the art libraries in the Federal Republic of Germany. These will come under the headings "co-operation and association", "networks", "computers or information technology in art"; the "Arbeitsgemeinschaft der Kunstbibliotheken" (Association of Art Libraries), as well as cooperation and the exchange of information in Munich. It will become obvious that the conditions in this country differ in some respects from those in the USA, Britain or France. Last but not least, this is connected to the concept art libraries in West Germany have of themselves. Whoever wishes to understand the situation here, at least to some extent, should take a glance at the origins of the art library in Germany. Apart from a few insignificant precursors, they begin around the middle of the 18th century when two types of libraries developed, considerably differing in functions and aims. On the one hand there are the libraries of the academies of art, which restricted their acquisitions essentially to material relevant to the subjects taught, i.e. subjects covered by the current term "Mittlere und Neuere Kunstgeschichte" [Medieval and Modern History of Art] (a course offered at German universities). Some of these partly municipal, partly courtly institutions developed from private art schools. Their foundation did not always promptly coincide with the establishment of an own book collection. The libraries of the academies at Stuttgart (founded in 1761), Dresden (1768), Munich (1770), Kassel (1777), Berlin (1790) and Düsseldorf (1819) should be Especially mentioned in this context (1). Even if use in nearly all of these cases was restricted to professors and students, the libraries of non-profiting organizations were open to the more general public, e.g. the "Hamburgische Gesellschaft zur Beförderung der Künste und nützlichen Gewerbe", which since 1765 owns a public library comprising several thousand volumes (2). They were a welcome supplement to the aforementioned institutions, as their collections reflected the concept of "art", technology and craft as one, a concept still unquestioned during the 18th century. More than one art library in present-day West Germany in fact owes its origin to the bibliomania of princes. The library of the "Staatliche Kunstsammlungen" in Karlsruhe may serve as an example. From 1759 onwards it was systematically developed by its founder, Margravine Karoline Luise of Baden, and in 1783 already comprised more than 3300 publications (mostly biographies of artists and theoretical works) (3). Like the one at Karlsruhe, most of the art libraries founded during the following century were designed for reference collections for the staff of the respective museums (4).

This is also true for the library of the Berlin "Kunstgewerbemuseum", founded by the "Großer Berliner Handwerker-Verein" in 1867 for the collection of the "Hamburger Kunsthalle" of the same year, and for the somewhat older library of the "Bayerisches Nationalmuseum" (1855). By far the most important institution of its kind, is the special library for the history of art and culture in German-speaking countries which has been developing at the "Germanisches Nationalmuseum" in Nuremberg since 1852. It was not until relatively late, that departmental libraries of various sizes were founded at universities and technical universities. This may be surprising in view of the long tradition of the history of art as a subject at German universities -although in the beginning it was still closely connected with asthetics, literary science, and above all classical archeology. This tradition goes back long before the year 1844, when the subject became institutionalized with the establishment of the first professorship for the "Modern History of Art" at the University of Berlin. Thus during the eighties of the 18th century, the master of drawing at Göttingen University, Johann Dominicus Fiorillo, had already begun to lecture regularly on the history of art (5). In most cases, these department collections were and are financially considerably underprivileged due to the university libraries which cover the same subjects. Thus, it was only in extremely rare cases that they could be sufficiently equipped for research. One of the exceptions is the library of the History of Art Institute at Bonn University, founded in 1872. It was Paul Clemen's outstanding merit, to succeed in increasing the collection to 30,000 volumes by 1935, with the help of private sponsors. When he entered office in 1902, it comprised a mere 100 volumes. Through this he made the Institute at Bonn the largest research institution of its kind in West Germany, before World War II (6). In contrast the 2400 volumes were a very modest collection, which the "Kunsthistorische Seminar" of Munich University owned in 1924 - the year when Heinrich Wölfflin retired from his professorship there to go to Switzerland (7).

II.

Roughly speaking, this is the historical background of the great variety of West-German (including West-Berlin) art libraries, which differ greatly in size, function and collection policy. How many there are exactly, is difficult to reliably estimate and depends on where one draws the borderline between art history and its related subjects. Whoever looks at the respective handbooks will get rather a confusing picture. Thus a directory from 1970 for the

BRD (including West Berlin), refers to 89 libraries with special collections of art history (8), while the recent edition of the World Guide to Libraries lists no fewer than 121 of them. 58 of these are libraries of university institutes or academies of art respectively, 56 diverse kinds of special libraries (mostly museum libraries) and 7 are libraries of the regional boards for the protection of monuments (9). Also to be considered are the hardly accessible reference collections of the numerous associations for the preservation of antiquity, local history and art. Some, because of their collections of so-called "grey literature" on local art history, or 19th and 20th century art respectively, are a valuable if not a well-known supplement to special public libraries. Therefore, the estimation of "a total of 130" (10), seems to be too low, rather than too high. This becomes even more differentiated by the fact that there are special art history holdings outside the relevant special libraries, i.e. in general research libraries and private libraries open to the public (11). Not every art historian is familiar with the fact, that for example Düsseldorf University Library specialises in a collection of "art and art history of North Rhine-Westphalia"; or that the "Bayerische Staatsbibliothek" and the renowned "Herzog-August-Bibliothek" in Wolfenbüttel compete in collecting those precious "livres de peintre", which usually even the large special libraries cannot purchase because of budgetary problems.

There are about 40 to 50 libraries, which on account of their holdings and functions are of interregional significance and play an essential part in art research. Therefore, the "Verzeichnis der Zeitschriftenbestände in den kunstwissenschaftlichen Spezialbibliotheken der Bundesrepublik und West-Berlins (VZK)" by Marianne Prause (Berlin 1973), only lists the serial holdings of 38 libraries. Two of them are large general research libraries, the "Staatsbibliothek Stiftung Preußischer Kulturbesitz" in Berlin and the "Bayerische Staatsbibliothek" in Munich, which lost a great deal of its art literature during World War II, but which now holds an extensive collection. This library annually spends about the same amount of money on its art literature collection, as the biggest special libraries in the BRD. On account of the copyright deposit, it also receives all art history publications printed in Bavaria automatically.

Heidelberg and Berlin University libraries have also been included in the VZK. Heidelberg University Library, which participates in inter-library lending, is especially important for supplying the relevant literature. Since 1920 it specialises in a collection of "Mittlere und Neuere Kunstgeschichte" [Medieaeval and Modern Art History] with 740 current periodicals, and sends out lists of

its new additions. These activities were at first sponsored by the "Notgemeinschaft der deutschen Wissenschaft", and later on by the "Deutsche Forschungsgemeinschaft". Of the remaining libraries, 24 belong to museums, (including two for non-European art and one for a coin collection), five to university departments and three to research institutes. Two more libraries belong to the so-called "Landesgewerbeämter" and offer special holdings in fields which are known as "arts and crafts" in English and "arts et mêtiers" in French. Three institutions must be especially mentioned because they are not members of the "Arbeitsgemeinschaft", which I will refer to later. These are the already mentioned libraries of the "Staatliche Kunstsammlungen" (including the "Badisches Landesmuseum") in Karlsruhe with approx. 120,000 volumes and more than 430 current periodicals, and the museum library of the "Staatliche Museen Stiftung Preußischer Kulturbesitz" with approx. 105,000 volumes and 496 current periodicals (12).

III.

What is the real meaning behind the "Arbeitsgemeinschaft der Kunstbibliotheken (AKB)"? Considering the mentioned figures, it may be of surprise that this association, founded in Cologne in 1964, does not consist of more than seven members; in 1977 there were still only six. The association was established due to a proposal made by the "German Research Association" and by the "Wissenschaftsrat", and was sponsored by the "Fritz Thyssen Stiftung". Some of the members belong to museums, and others to research institutes. They are as follows:

-Kunstbibliothek, Staatliche Museen Preußischer Kulturbesitz, Berlin
[Art Library, State Museum of Prussian Art Collections, Berlin]
-Bibliothek des Kunsthistorischen Instituts, Florenz
[Library of the Institute for the History of Art, Florence]
-Kunst- und Museumsbibliothek der Stadt Köln, Wallraf-Richartz-Museum, Köln
[Art and Museum Library of the City of Cologne, Wallraf-Richartz-Museum, Cologne]
-Bibliothek des Zentralinstituts für Kunstgeschichte, München
[Library of the Central Institute for the History of Art, Munich]
-Bibliothek des Germanischen Nationalmuseums, Nürnberg
[Library of the Germanic National Museum, Nuremberg]
-Bibliotheca Hertziana, Rom
[Hertziana Library, Rome]
-Bibliothek des Deutschen Archäologischen Instituts, Rom
[Library of the German Archaeological Institute, Rome]

These points about the individual libraries of art history in the narrower sense, will suffice here. Details about history, collections, special catalogues and publications can be found in a whole range of literature in this field,

which is partly written in English (13). The Nuremberg library, founded in 1852, is the largest and most traditional institution with 485,000 volumes and 1500 current periodicals. However, because of this museum's policy, it only has one section on art history out of its total collection. Whoever studies the art of German-speaking countries, will find that the literature there, dating from the 19th century onwards (including "grey literature"), is more complete than anywhere else. There are significant manuscripts and incunabula, and above all a collection of publications on Dürer, which is kept as complete as possible. In Nuremberg the "Schrifttum zur deutschen Kunst" [Bibliography on German Art], published since 1934 is also compiled (14), like the "Archiv für bildende Kunst", which is progressing. The original collection of the Cologne Library, goes back to 1876. Its present system is due to the merging of the book collections from the"Wallraf-Richartz-Museum" and the "Kunstgewerbemuseum". Its field of collection includes all types of European fine arts except architecture (148,000 volumes, 880 current periodicals). As far as information technology is concerned it is the most future-orientated member of the AKB (see below).

In West Berlin the art library in the narrower sense, only forms part of a bigger department of the museums, as far as they are situated in the west section of the city. Originating from the library of the "Kunstgewerbemuseum" (1867), it covers all the various kinds and periods of European art (160,000 volumes, 660 current periodicals). Its legendary collection of old books on architecture and ornamental engravings, which was drastically reduced during World War II, was completed again by later acquisitions. This collection is familiar to all of you through the catalogue from 1939, which was reprinted later on. Extensive holdings of free-hand drawings (including the collection by Destailleur), applied graphics and a costume library with over 14,000 volumes, complete the general picture.

The libraries of the research institutes in Florence (founded in 1897) and Rome (1913), enjoy high standing, as at present they both own approx. 140,000 volumes each on Italian art, (current periodicals: Florence 1000, Rome 900). If they are considerably different from each other in many respects, this is partly due to the fact that the library in Florence is sudordinate to the "Bundesministerium für Bildung und Wissenschaft", whereas the institution in Rome is a "Max-Planck-Institute".

I do not think it necessary to comment any further on the library of the "Zentralinstitut" in Munich, founded in 1946, the counterpart to the "Kunstbibliothek" in Berlin, although it does lack an art collection of its own (see the entry in "Bibliotheken in München").

The functions and aims of the "Arbeitsgemeinschaft der Kunstbibliotheken" are very varied: "The promotion of art research by supplying material covering a most comprehensive and complete range as possible, and through a great deal of information being made available through catalogues, bibliographies and documentation" (15). In addition the current exchange of experience amongst the staff of those libraries which are members of the AKB, is to be encouraged. As the case may be, institutions and individuals taking an interest in the enterprises of the "Arbeitsgemeinschaft" are invited to the meetings. One of them is the representative of Heidelberg University Library, which receives its funds for its art history literature from the same source as the libraries of the AKB. There were two main reasons why membership was restricted to a few reference libraries of interregional importance: Firstly, it was well known, that the smaller libraries mostly did not satisfy the standards set by the so-called "Wissenschaftsrat" [Council of Sciences] or the requirements which are to be made from a facility for scientific work, respectively. Secondly, there was the worry that too many members, or the differences in their achievements, would rather hinder than promote effective co-operation (16). In contrast to the other, (or at least most of the other) national associations of art libraries represented in IFLA, the AKB is only a "loose association lacking legal form and standing bodies" (17). There are no statutes or rules of procedure.
Since its foundation, it has been the "history of art" section of the "Arbeitsgemeinschaft der Spezialbibliotheken" [Association of Special Libraries], which was founded in 1946 as the "Association of Technical and Scientific Libraries". The AKB is represented at IFLA by the Association of Special Libraries. The AKB does not issue a periodical of its own, which would inform a greater circle of colleagues of its discussions and decisions. This is in contrast to the more recently founded Art Library Societies of Britain (1969) and the USA (1972), which even consider library schools, publishers and booksellers as their members. However, the minutes of the meetings - up until now 24 - which generally take place once a year, are on display for inspection at the participating institutions.
It is not necessary to dicuss the activities of the AKB throughout its twenty years of history, which in many respects, as far as real co-operation is concerned, would be one long story of explanations of good intentions and given-up projects. Those who are interested should refer back to the literature quoted earlier, which partly has English summaries. The fair division of tasks with regard to library routines, has been necessary for a long time because of the alarming shortage of staff, but has not yet been realized. Various circumstances have until now prevented shared cataloguing, as well as a uniform system of call-numbers or the compiling of a joint subject-catalogue, through

which a great deal of unnecessary work could be avoided. There are also rather differing opinions about the advantages and disadvantages of electronic data processing. Automation has only been introduced at the Library in Cologne, which is the most recently founded and was not "burdened"with an older catalogue. It is stated, according to 1975 report by TÜmmers (18), "When the "Arbeitsgemeinschaft" concerned itself with automation, it affected computer-aided cataloguing of the retrospective holdings and new additions of the "Kunst- und Museumsbibliothek" in Cologne, which began in 1966". It should be remembered in this connection, that it was the desire to test the opportunities offered by electronic data processing, that created the immediate occasion for founding the "Arbeitsgemeinschaft" in 1964. Besides it was felt that the documentation service, operated by conventional methods at several art libraries and institutes of art history in Germany, should be co-ordinated (19). TÜmmers, who was chairman of the AKB until 1969 and head of the library in Cologne has, just like his successor Albert Schug (20), repeatedly and thoroughly discussed the possibilities of computer-aided documentation of publications and pictures, which is also a main topic at this year's IFLA Conference. The issue of electronic data processing has disappeared from the agenda of AKB meetings for quite some time now. The word "computer" causes a certain uneasy feeling amongst many art historians working in libraries in this country. The reasons for this were recently summarised by the ZÜrich pre-historian, Franz Georg Maier, with regard to archaeological research:"Taking technical standards as absolute may lead to one becoming a slave to a documentation which is much too perfect, or to taking refuge in its perfectionism. However, just the most subtle methods of analysing and measuring alone, will not enable us to give an interpretation or synthesis of data, or to reconstruct past human life out of the earth" (21). If there is disagreement on the possibilities and limits - or in the extreme, sense or nonsense - of computer-aided subject cataloguing of art literature, because of various conceptions of the science of "art history" , one should still be able to achieve an improved co-operation relatively easily in the less particular field of practical problems. Amongst the urgent practical tasks of the AKB, there is above all, the preparation for the common introduction of the new rules for alphabetical cataloguing (RAK-WB). This has, as regards all the exhibition catalogues acquired by the participating libraries, already called for a standardized procedure. Not until this is carried out, will the pre-conditions for shared cataloguing be established. The AKB became more familiar through two bibliographic enterprises, which however, do not result from joint efforts, but are achievements of two individual members. One of these is the already-mentioned "UZK" by Marianne Prause. With its approx.

15,000 titles (including cross references), it is not only a record of the relevant material for quick photocopying, but is also a bibliography of periodicals about art history and the marginal disciplines in this field. These include the history of trades and handicrafts, the history of technology, philosophy and bibliophily. An up-dating of this much-used reference work is planned (22). The other enterprise is the "Verzeichnis der Kataloge und Führer kunst- und kulturgeschichtlicher Museen in der Bundesrepublik Deutschland und in Berlin (West) (VKFM)" [Union list of catalogues and guides of art- and cultural history museums in the BRD and in West Berlin (VKFM)], of which two volumes have already been published (23).

It is only with acquisition that longterm co-operation has been achieved. Since the sixties, the growing number of publications , but also the broadening horizons of interest, have increasingly led to the fact that regular funds for purchase, even in the case of the biggest art history libraries in the BRD and West Berlin, are not adequate to achieve a relative completeness of acquisition. The German Research Association has therefore decided to subsidize, amongst others, the seven member libraries of the AKB, within its project of guaranteeing adequate provision of literary resources (24). This support which was first effected in 1972, is especially aimed at specific subject areas needing special attention. The programme is concerned with the following libraries and special fields:

Berlin, Art Library, State Museum of Prussian Art Collections:
- Art of Spanish and Portuguese cultures up to 1900;
- Art of Anglo-Saxon culture up to 1900;
- Art of the Scandinavian countries up to 1900;
- 20th century architecture (including town architecture and planning).

Florence, Institute of the History of Art:
- Art of Northern Italy;
- 19th and 20th centuries Italien art.

Cologne, Art and Museum Library in the Wallraf-Richartz-Museum:
- Belgian, Dutch and Luxembourg art up to 1900;
- 20th century art (architecture excluded).

Munich, Central Institute for the History of Art:
- French Art up to 1900;
- Art of East and Southeast European countries, including 20th century;
- Art literature from East and Southeast European countries;
- Theory of art and history of art as a science;
- Iconography.

Nuremberg, Library of the Germanic National Museum:

Art of German-speaking countries from periods up to expressionism inclusively.

Rome, Hertziana Library:

Art of Southern Italy.

Rome, Library of the German Archaeological Institute:

Early Christian and Byzantine art of the Mediterranean up to the end of the 7th century. (This library only participates in the subject area project since the beginning of 1978).

The subjects "Arts and crafts", "Handicrafts", "Folk Art" and "Aesthetics", have been taken into account within the assigned subject areas, just as collection, exhibition, and auction catalogues have. "Grey literature" including leaflets, can only be acquired to a certain degree of completeness (25), whereas popular-science publications are only purchased by selection. This all-encompassing project of the German Research Association is to ensure, that ideally all material relevant to research - regardless of its form of publication - shall be available in at least one of the participating libraries. In assigning the individual subject areas to the participating libraries , their traditional strong subjects have been taken into consideration. With regard to their overall holdings -(though not to the organization)-the seven libraries of the AKB with their 600,000 different titles, correspond to those central subject libraries which have been in existence in England and France for a long time, e.g. the National Art Library at the Victoria and Albert Museum and the "Bibliothèque d'Art et d'Archèologie" in Paris. But even this comparison does not quite apply, because the collecting policy of the AKB does not include art literature from all periods and countries as in Malraux' "Musée imaginaire". Rather, the programme is restricted to European (and Euro-American) art, from the early Christian period to the present day. This is a discipline in which the German art historian who has done his doctoral dissertation in "Medieval and Modern Art History" [Mittlere und Neuere Kunstgeschichte], may feel relatively competent. Something else is bound to have come to the notice of colleagues from abroad: this co-ordinated collection development programme is not without reason, restricted to scientific art literature and does not include the more or less comprehensive photo collections existing at the large special libraries, sometimes as an independent section (26). Well, that is all about this joint programme, which has substantially improved the possibilities for research work in our discipline. Stimulated by the example of American, English and French colleagues, a larger symposium on German art libraries was held at the Association of Special Libraries meeting in 1981. Not only were the activities of the Association of Art Libraries reported, but also colleagues from institutions not represented at the AKB could speak about experience in their own fields.

A few less than 60 participants gathered on this occasion out of a total of 170 invited institutions situated in the BRD (including West Berlin), Austria and Switzerland (27). More meetings of this kind are to follow. What about co-operation among Munich art libraries? Until now, there has only been one meeting in 1973, in order to make a general acquisition agreement, to prevent the unnecessary purchase of the same books two or three times. There were discussions about how to best meet the interests of the many colleagues working as art historians, art critics or art dealers and especially those of the 1900 students studying the history of art as their main subject at the University of this city.

The "Central Institute" library (which is not open to all students), can only purchase some of the relevant research literature beyond the limits of the German Research Association programme. As far as acquisition of art literature in the most narrow sense is concerned, it can help the smaller special libraries which have very limited funds, for example: "Staatliche Graphische Sammlung" [State Collection of Graphic Art], the "Bayerische Staatsgemäldesammlungen" [Bavarian State Collections of Paintings] and the "Akademie der Bildenden KÜnste" [Academy of Fine Arts]. However , the more marginal subjects are mostly left to smaller specialising institutions, which accordingly have retrospective holdings of good or excellent quality. These are as follows: the "Bayerisches Nationalmuseum" [Bavarian National Museum] for folk art and arts and crafts; the Technical University for civil engineering and town planning; the "Staatliche MÜnzsammlung" [State Collection of Coins] for numismatics; the "Bibliothek des Deutschen Museums" [German Museum Library] for the history of technology and the Theater Museum for stage pictures. The"Central Institute" sends some of its pamphlets (esp. small leaflets) on modern art to the "Städtische Galerie im Lenbachhaus" [Municipal Gallery in the Lenbachhaus] where this material - although uncatalogued - is made available to the client. Decisions on the acquisition of especially expensive works are made in agreement with the "Bayerische Staatsbibliothek" which is the only institution purchasing the expensive facsimile editions of illuminated manuscripts and modern "livres de peintre". Thus contact between libraries in Munich primarily serves co-operative collection. The general impression seems to be, that because quick ad hoc contact is possible, it makes regular meetings seem superfluous. The compiling of a union list of art history periodicals held in Munich libraries, planned since the early post-war years, has been a desideration for a long time. This is because the serials of the "Bayerische Staatsbibliothek", listed

in the VZK,only constitute a fraction of the entire holdings of this biggest library in the BRD. One becomes envious when one learns of a similar project in Paris, which has been under way since 1978. The circumstances outlined in this paper could certainly have been emphasised differently. I do not see that it is possible to come to a straightforward conclusion, as there are so many different factors involved. There are still unattended areas, where co-operation would be possible and a lack in the exchange of experience through which the big libraries could by all means learn something from the small ones. This situation concerning art libraries in the BRD differs from that in most other western countries - at least those which are represented here. There are various reasons for this, which cannot be discussed here in detail. Above all there is often an extreme shortage of staff, and therefore many colleagues see more sense in exclusively concentrating on problems of their own library. In many cases these are problems which originate from the history of an individual library and are thus very special ones. At first glance it does not seem possible to solve them by co-operation with other institutions. All the time spent mastering very limited joint tasks would in the long run lead to a considerable decline of work (e.g. subject cataloguing). Conclusions still remain to be drawn from this. Thus it may not only be due to a lack of money and an aversion to innovations, but also due to a certain self-sufficiency, because since 1977 the art libraries in the BRD have been represented only by an observer who appears now and again, and who knows hardly anything about information technology. The impression that foreign interest in our art libraries is more intense than vice versa cannot be denied (28). But there is something else which should be mentioned in this context: it is important that the rapporteur does not restrict himself to just giving a list of figures of holdings or of accomplished or planned projects, which can be found in literature anyway. In his paper at the Copenhagen IFLA meeting four years ago, which is full of new ideas, Trevor Fawcett reminded us of the fact, that art history as a subject becomes real in the art library which for its part reflects and creates an understanding of art as a science, in the case of those working as art historians (29). The "typical" German art history

library it seems to me, is still bound far more than its Anglo-Saxon counterpart to the idea of making a strict distinction between "art" and "non-art". The so-called subject "industrial culture", for example, is not very well recognised as a field for collection and sometimes other special libraries are left to deal with it completely. The dogma of the "absolute mind" (Hegel) manifesting itself in art, became a fixed concept through the philosophy of German idealism but has long since become obsolete. This dogma as an ideological basis is an increasing hinderness to library classification. The history of art as a science has a new definition, having become a much wider field, working inter-disciplinarily and dealing with completely new topics, which have not been taken into account by traditional classifications. Probably in view of this situation, which however, does not just apply to German art libraries alone, Fawcett following George Kubler, proposed a classification of cultural assets using the term artefact and no longer aesthetic criteria as a basis. These cultural assets would have to be documented in an art library. However, there are no signs that such a radical and important re-orientation would take place in this country at present. Last but not least there are practical reasons for this (30).

At any rate, many a colleague would probably wish, that consideration should not only be given to the actual technical

and organisational problems, or to the mediation of the contents of documents, but increasingly to the contents themselves.

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Title: Videodiscs and Art Documentation

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OVERVIEW

Optical videodisc technology is a very effective tool for art research, archival preservation and the presentation of visual materials. In fact, this new technology has the potential to revolutionize the current methods of conducting research and the storage and retrieval of art documentation. There are, however, many issues concerning videodisc technology which should be identified before disc can become a practical reality for the art world.

This paper will outline:

1. How a videodisc works, including specific advantages and limitations of the technology for the field of art librarianship, and,

2. How the videodisc may be applied to visual resources and art documentation from the collection manager's point of view. Various art related videodisc projects completed between 1980-1983 will be used as illustrations, and the videodisc done at the Museum of Fine Arts, Boston (MFA) will be used as a case study.

BACKGROUND

Videodisc may be defined as an electronic technology for storing and retrieving visual images. It is a concentric track medium which provides, in a playback-only mode, sustained aural, motion and visual presentations. It consists of a disc,

which resembles a 12 inch, 2-sided, long-playing audio record and a player, which has various features or capabilities depending on its manufacturer.

Over the past ten years, nearly one billion dollars has been spent by many large corporations to develop the videodisc. This research has resulted in three different technologies which are aimed primarily at the consumer, or home entertainment market. From a marketing standpoint, the videodisc was developed to compete with the popular home video tape recording systems; and to win a share of the annual 6.5 billion dollar color television business. Conceivably this goal for high volume distribution of low volume video programming could be achieved in the consumer market because the industry perfected a method of replicating discs that was more efficient than producing copies of videotapes. Disc replication is similar to making audio records where countless high quality copies are pressed or stamped from a glass master.

Videodisc is different from videotape because it is easier to replicate, less expensive to produce and store, and it is permanent. Unused videotape has a shelf life of 5-10 years. Copies of tapes can be made at great expense of time and equipment, and there is a noticable degradation of quality in

successive generations of tapes. Also, making 100 copies of a tape requires 100 tape machines, each running the length of the tape at real time (30 frames/second). Videotape cannot pause or stop without having the tape physically damaged by the tape machine. This results in oxide dropout or "snow" on the screen.

Since videotape is recorded at real time, it is also difficult to access individual frames without counting the approximate location of frames on the tape using a counter on the tape machine. Although it is possible to store single images on tape with equipment called "electronic still stores", these are not widely available and can store less than 4,000 individual frames.

NON OPTICAL SYSTEM

RCA's videodisc system which is aimed at the consumer market was unveiled in March 1981. It is called a grooved capacitence system because it uses a stylus which is guided through grooves on a disc, much like the way a record does and plays 30 minutes per side. This system's player is "dumb", in that it has very limited features, and it only provides linear access to what is on the disc. It is encased in a sturdy, plastic cover and is inserted into the player. The disc is very fragile and is

supposed to last for only 300 plays.

The second system is JVC's, which is supported by Matsushita, General Electric and Thorn, EMI in England and is not currently on the market. The JVC system is a grooveless capacitence system, where a capacitence stylus reads electronic impulses of a flat, ungrooved disc. It plays 60 minutes of programming per side and has features which include fast forward, and reverse, as well as two audio tracks. The life span of the JVC disc is not known, but is estimated to last for over 1,000 plays.

OPTICAL LASER VIDEODISC

The third system, and the only one currently applicable to the industrial, educational and information management markets is the optical reflective laser videodisc system. This system, available to consumers since 1978, was developed by joint venture between Philips, MCA and IBM. In 1979, they formed a subsidiary called DiscoVision Associates, which in 1982 was purchased by Pioneer Electronics Corporation. Universal Pioneer makes the optical disc player and presses discs in Japan. Optical videodisc systems use a laser beam that optically reads information stored in pits which are pressed into an

aluminum disc. The disc itself is plastic coated, making it virtually damage free. Barring any serious scratches or warping, this disc has an unlimited life. Besides permanence, other features of the optical disc system include:

1. Dense storage capacity; that is, in recorded form there is the potential for storing 54,000 still frames on one side of an optical videodisc, and each of these stills can be separately addressed. For those who think in terms of slides, this is the equivalent of 675 universal slide trays.

2. Random access to any of these single frames, which are numbered, in less than five seconds;

3. Frame-by-frame advance and reverse at variable speeds;

4. Two audio channels. This can provide either stereo sound or instruction in two languages;

5. Programmability. This can be done with a microprocessor which is built into MCA's industrial player, or through an external computer which can be attached to the player by means of a built in port.

This system can be called the "intelligent" frame access player with a random access program approach. The programmability feature expands the capabilities of the videodisc player because it allows for interactivity or programmed instruction. This, coupled with random access and dense storage, allows for endless applications for retrieval of instructional, training and other stored information.

Other companies actively engaged in optical laser videodisc

systems include Sony, 3M and Magnavox. Each of these systems employ the same basic methods for disc production, but their players and discs have different features, and some systems may not be compatable or interchangable with each other.

Another laser disc system is the transmissive system which allows a laser beam to penetrate both sides of a clear plastic disc and read 108,000 frames without having to turn it over. This was designed by Thompson-CSF in conjunction with Xerox, for use in the industrial market with specific applications designed for office systems and data processing.

Industries employing the optical videodisc system include hospitals, publishers and General Motors (who bought an entire year's production of industrial disc players to help train sales personnel). Additional groups involved with the interactive capabilities of optical videodisc include the U.S. Army and Hughes Aircraft (who recently put a six foot high stack of repair manuals onto one disc), who have developed programs for equip- ment maintenance.

APPLICATIONS TO ART DOCUMENTATION

Large corporations or government agencies are not the only areas where disc technology is used, however. To date, there

have been only a handful of videodisc projects developed specifically for the field of art documentation and these may be divided into the following general areas:

1. Museum exhibition/installations
   a. "audio-visual" resource areas for the public
   b. visitor information/maps

2. Commercial enterprises
   a. publishing - scholarly or "publicity" oriented
   b. educational programming - documentary or interpretive

3. Document storage and retrieval/collection management
   a. in house use in slide collections
   b. museum to museum networks

EXHIBITION USE

The Metropolitan Museum of Art, N.Y., has contributed the most recent videodisc (1983), for use in the public exhibit. It was designed as part of the Michael C. Rockefeller Wing of Primitive Art and this interactive videodisc allows a visitor to gather more information on cultures of Africa, the America's and Pacific Islands as shown in the galleries. By pressing a series of numbers on a panel at a viewing station, various topics appear on a television screen. After selecting a topic, the viewer sees a one minute film sequence and/or still images, with information relating to topics such as people, food, art, ceremonies etc. In this case the videodisc hardware is hidden

from the viewer who only sees touch sensitive panels and a television screen. The Museum of Science and Industry, Chicago, undertook a similar exhibition related project a few years earlier on the subject of newspapers and freedom of speech.

Another early project was done by the Smithsonian Institution's National Air and Space Museum. Existing audio-visual programs (over 20 presentations running in a continuous loop, 10 hours a day, 364 days a year) were transferred onto 20, one-sided discs, which are housed in the Smithsonian's computer facility. The presentations, programmed to play in a continuous loop, are transferred via coaxial cables to viewing locations throughout the museum. Although this application is not interactive, it has been successful from the Museum's point of view because the system is practically maintenance free. This is not the case with the multi-image slide shows which are subject to constant repair and maintenance.

COMMERCIAL USE

One of the only known commercial "art related" videodiscs is being produced by the National Gallery of Art, Washington, D.C., in conjunction with Videodisc Publishing, Inc. (VPI). A consumer

oriented videodisc, its design is based on John Walker's book, "The National Gallery of Art". The two sided disc (not currently available at this writing) consists of, on one side, a 30 minute tour of the galleries, and on the other side, 1,500 stills, with details and captions highlighting the National Gallery's collections. Although specific details are sketchy, VPI has made a unique royalty arrangement with the National Gallery based on disc sales, which will be sold in it's Museum Shop, and loaned free of charge to museums as part of the Gallery's educational service.

Although this disc was made by a commercial producer, under the National Gallery's supervision, (the Metropolitan's disc was done the same way), art collections should resolve the following issues before deciding on a project and/or a production company:

- copyright/royalty arrangements
- quality and content control
- time and budgetary commitments

Also, the lack of standardized consumer videodisc hardware presents marketing problems for the comercially produced disc.

IMAGE STORAGE

Several videodisc projects related to archival storage and

retrieval or collection management are described below.

The International Museum of Photography of the George Eastman House, Rochester, N.Y., recently produced a videodisc entitled "To Search for Treasure". On one side, is a 30 minute program showing a tour of the galleries with the Museum's director. On the other side, more than 150 original photographs were transferred on to videotape to show still image resolution. A large portion of the disc also clearly demonstrates the steps involved in making the disc. This disc was made primarily as a fund raising tool for a larger disc project which would record the collection's enormous holdings of over 500,000 photographs and negatives, 3 million movie stills, 8,000 pieces of film equipment and a 35,000 volume library. Since almost 1.4 million dollars would be needed to produce and manufacture these discs, the Eastman House's first disc detailed the potential benefits of the videodiscs for collection management, archival preservation, and visitor orientation.

Another document oriented videodisc was completed in 1981, by at the University of Iowa. This system was designed jointly by the Office of Visual Materials in the School of Art History

and the computer assisted Instruction Laboratory as a "possible aternative" to the traditional art slide library. One thousand (1,000) 5 x 7 black and white photographic prints of woodcut engravings by Durer and Raimondi were photographed onto movie film, and transferred onto disc. Similarly, data about objects (Bartsch catalog number, artist, medium, date, title and theme), were entered into a HP 2000 minicomputer, and a program was designed to display both text and visual documentation side-by-side.

Selections for viewing visual and textual data are controlled by the computer and it commands the videodisc to randomly access any associated information as it is called up. Besides being one of the first applications where visuals on a videodisc were merged with text programmed into a computer, this project also evaluated and tabulated user reaction to this new "research system".

In general, the system's storage capacity and random access capabilities (as compared to browsing through slide drawers) were praised by its users (staff and students of the University of Iowa's Art History Department). Negative comments focused on the limited resolution and the lack of side by side comparisons of images Also little interest was shown in replacing

slides with videodisc images in a classroom situation. This is a good sign because replacing slide libraries and slides used in the classrooms with videodisc images is perhaps the first reaction viewers tend to make. This is potentially dangerous because, although videodisc systems take up significantly less space than a slide library, and more images can be viewed on disc than by manually rooting thru slide drawers, it is important to note that the image transmitted via disc is a video image and not a photographic image. The resolution of a television screen at 525 lines in the United States or 625 lines in Eurpoe does not seem to transmit enough clarity of image from which to teach.

Although the resolution issue will probably be solved in the next few years, it seems that currently the best use of the videodisc is as a reference tool for browsing at large amounts of visual information.

MFA VIDEODISC PROJECT

Perhaps the earliest informational art related videodisc was conceived and produced by the Museum of Fine Arts, Boston. Being most familiar with the project, this case study will be used to highlight the advantages and limitations of videodisc

technology for art information. The MFA's disc documents objects from the Museum's permanent collection. It was pressed in November, 1980, and is a prototype for investigating the potential uses of videodisc technology for library and archival applications.

Essentially, the disc was conceived (1) for use as a tool for art historical research and to aid in management of visual resource collections in an art museum. This project also represented an attempt to find adequate solutions to the problems of using video as a storage medium for photographic documentation of art objects. Since this was the first application of disc technology in an art museum, many production procedures and technical processes have been refined and standardized in the past three years. It is conceivable then, that the MFA project appears to be simple, but it was an early attempt to qualify many issues important to the documentation of art objects and art information. Specifically the project investigated:

1. . Image permanence and retrieved image quality, or resolution. This was important because perceived clarity of detail is crucial to art research.

2. The difficulties of transferring single still frames frames to video.

3. The limitations on editing and updating stored material.

4. User reaction to this new technology in a library or research setting, and,

5. Interface with computers as an aid to cataloguing and access of information.

It is important to emphasize that although the videodisc possesses enormous storage capacity, it is not enough to simply store information on the disc. It is like taking 54,000 catalog cards or 675 carousel trays and dumping them on the floor. Finding aids or sophisticated retrieval systems must be devised and the act of organizing and cataloguing these images is no small task. It became clear at the outset that none of these practical and technical shortcomings or problems could be overlooked by an art collection, if it were to make a commitment to actively produce videodiscs for research or other applications.

Thus the purpose of the project was to test whether videodisc was an adequate medium for archival storage of photographic documentation of art objects. The emphasis here was the disc's use as a supplement to, but not as a replacement for, existing slide and photograph archives. The question remained...could it be done? If so, could videodisc become a viable cost effective part of the MFA's collection? If the disc was not feasible, how limiting were the limitations?

Before commiting the Photographic Services Department to a

major videodisc project, a pilot project was established based on the following parameters:

1. An optical laser disc system utilizing Pioneer's industrial player was selected as the best technology;

2. A timetable of not more than a year for project completion and a small budget were established. The budget would be applied to slide transfers, disc production and hardware;

3. Existing 35mm color slides from the Museum's visual collection representing each museum department would be used;

4. No new photographic methods would be attempted for this project, but information about new photographic techniques would be gathered for future projects;

5. Slides demonstrating a variety of photographic qualities would be selected;

6. No slides would be cropped. Instead, special formatting would be investigated;

7. Slides had to be arranged in a logical manner, for easy access, using only the capacity of the disc player's microprocessor.

MFA IMPLEMENTATION

Once the disc system was chosen, two thousand existing slides were selected as reprentative of the MFA's collection. They were arranged in an order similar to the cataloguing system used in the Slide Library which is derived from the system used at the Metropolitan Museum of Art. (2) Each slide

was numbered and its label information photocopied to provide a "hard copy" book index. This is an informal data base through which single objects could be identified. With an appropriate computer pro- gram, this data base could be maneuvered to allow simultaneous retrieval of a specific image and all information relating to it.

Text describing objects was not put on the disc, because of the inability to edit material once the disc was pressed, and because cards of information would have to be specially formatted for television viewing. The criterion employed in making this selection of slides emphasized, along with aesthetic, departmental and archival considerations, comparative photographic characteristics including age of the slide, film stock and color balance.

The question of slide format was also carefully considered since a 35mm slide has a different aspect ratio than that of a television screen, which is more square. Both vertically and horizontally oriented slides were transferred to fit full frame, into the safe-title area of the television screen. This means that on the MFA disc, both the highest vertical and widest horizontal slides are the same size. There was the choice of having horizontal slides fill the whole screen, but

this would mean that vertical objects would be cropped, something that cannot arbitrarily be done with museum pieces. This formatting provided a central axis on the screen from which the frames switch, even though a black border surrounds all of the images.

After accounting for these technical considerations, the process of getting the two-thousand slides onto a disc began. Although the transfer of motion picture film to videotape had been common in the film industry, little need had ever been shown for doing the same with a large number of still frames or slides.

The slides were transferred onto rolls of 35mm Kodak Duplicating Film, where each slide was individually assessed for color and density. The film was then shot in motion picture format. Next, the rolls of film were transferred onto video- tape which was, in turn, used to produce the master disc which is glass. Here it is important to note the number of gener- ations from the original slides that occur when making a disc.

Two small computer programs, utilizing the disc player's microprocessor were also designed for the disc. These programs provide limited interactivity. A series of primary and secondary menus were created to organize the images on the disc and

programming instructions were encoded on its audio track. When the program is executed the user sees consecutive frames showing the disc's title, acknowledgements and operating instructions.

After a command to proceed, a frame showing the eight primary index categories appear on the screen (these are the departments of the Museum). Employing the disc player's key pad, the user presses the number of the primary category to be viewed. A frame showing the secondary categories will then appear on the screen. Once the number of a desired subcategory is pressed, the player searches and then displays all frames in the category, alphabetically by artist, and in groups, by subject. Each image is displayed for 1.5 seconds, which was selected as a good browsing rate. After the last image of a chosen category appears, the player is programmed to return to the secondary index.

With the key pad, the user may also stop at any frame, preview, review or return to either index. Alternatively, if the disc frame number is known (via the book index) the user can search to that frame directly.

IMPLICATIONS

In general, few technical problems were encountered. It was, however, one of the first major art applications of disc technology, and standard procedures and criteria for image quality were simply not available, and had to be developed at each stage of planning and implementation. One specific technical limitation of this project was the use of existing slides. This posed problems of consistency during the transfers, especially in the areas of contrast, color fidelity and aspect ratio.

With future disc projects, new photography specifically designed for the disc is imperative so some consistency could be maintained. Photography could be planned so that, for example, there might be twelve to twenty close-ups following the overall image, instead of having one frame per object.

Strategically, then, the MFA project confirms the optical laser disc's ability to be an effective medium for storage and retrieval of art documentation. However, the videodisc replaces neither the need for careful photography, nor cataloguing, and research about art objects. It mainly serves as a useful reference tool for viewing visual information. Other potential advantages of using disc technology for the field of art documentation would be:

1. to make collections housed in major institutions available to broader audiences. If, for example, a scholar was doing research on French paintings housed in the U.S. Collections, preliminary research could be done by browsing through "disc libraries". The researcher could then contact the collection that houses the desired object to order slides and photographs, by using the frame number on the videodisc as a reference, or order number.

2. Museum collections may be interested in the production and sales of videodics to the public as souvenirs (like postcards or handbooks, or as companions to exhibition catalogues)

3. The use of videodisc could reduce the need to handle original materials by providing, in video format a reference copy of the material. Clearly, scholars need to work from originals but for many researchers, referring to the videodisc image may meet initial research requirements.

4. The disc can be used as the visual arm of a computer, where text or descriptive information can be automated and linked with a videodisc which stores the images in a way that is similar to the University of Iowa Project.

The functional and technical limitations of the videodisc, which may not make it a practical alternative for every collection include these issues:

1. Disc cannot be edited or changed once pressed.

2. It is difficult to get good quality hard copy from a frame on the disc as seen on the viewing screen.

3. The resolution of the image viewed on the videodisc is limited by the monitor used to receive the signal. The current American standard television set has 525 lines of resolution. The quality of the image could be improved by using a high resolution monitor, yet the image would still not be the quality of an original print, slide or even a copy negative.

4. Software and hardware is limited in selection and availability. Software applicable to research in art history must be designed and developed, especially since all systems are not compatible

6. It takes considerable technical and economic commitment to create a videodisc. In order to produce a disc, all materials (still and/or motion) must be converted into the proper format for transfer onto videotape which is used to master a disc.

There are also a number of subtler issues which need to be addressed if art collections were to prepare videodiscs that would benefit art related research. Briefly, each museum or collection must formulate policies about disc based on their individual goals and objectives. Collection managers must ask how disc can be used most effectively to meet those objectives. If a collection decides to take advantage of the videodisc's features, and use it for educational programming or publishing, it then should be willing to accept the inherent limitations of the technology. Collections should also be prepared with answers to issues concerning copyright, the current

lack of photography and full cataloguing of objects, lack of computerized data bases for accessing materials and the lack of standardization between collections. But, with the development of uniform reproduction standards for documenting art objects by museums, and the production of needed computer software, the optical videodisc can cost effectively expand the services of a visual collection. Art information will be made available to new audiences, and disc can transform the methods by which art collections will collect and dessiminate visual information in the future.

FOOTNOTES

1. By way of background, the videodisc project was conceived and executed by the Museum's newly formed Photographic Services Department. This group was established in 1980, to develop Museum photographic policy, coordinate all visual documentation for the Museum and organize a state-of-the-art system for accessing visual materials. It consists of a Photographic Studio, Slide Library and Photographic Collection, with over 250,000 slides and photographs. Each of these departments have been in existence for over 75 years, but each developed separately, and served different functions for the Museum.

The department now develops photographic histories of objects, documents exhibitions, sells and rents slides and photographs, maintains a public circulating library of slides and oversees copyright policies.

These services are provided to the full Museum Staff, as well as the public, including visitors, publishers, scholars and research institutions. Since the slide and photograph collections were maintained so differently, the initial step to consolidate the large collection, was to text putting it on

disc, in order to see what was actually housed in those collections. Producing a disc would also eventually assist in other Museum functions like registration, cataloguing, marketing and sales.

2. Both Eastern and ancient art are arranged by country, medium, dynasty, and subject. Western painting, sculpture, prints and decorative arts are arranged by country, alphabetically by artist and then by subject.

SELECTED BIBLIOGRAPHY

Abbott, George L. [compiler] "Videodisc Bibliography: General Articles." Videodisc/Teletext. v.1, no.1. Winter, 1981. p. 47-56.

American Video Institute. Report: Interactive Videodisc Applications Conference. May 23-24, 1980.

Bailey, Whitney H. "The Computer Interactive Videodisc." Filmmakers Monthly. November, 1980. p.11-31.

Biddle, Wayne. "Dramatic Improvement of T.V. Image in the Offing." New York Times, January 4, 1983. p. C1, 6.

Bolt, Richard A. "Spatial-Data Management." Massachusetts Institute of Technology. 1979.

Business Week. "Videodiscs: A Three Way Race for a Billion-Dollar Jackpot." Business Week. July 7, 1980. p. 70-81.

Byte Magazine. V.7 no. 6. June, 1982 (entire issue). "Interactive Videodiscs."

Chittock, John. "The Development of a Major New Industry." Financial Times. November 12, 1980.

Crowell, Peter. "What is Video, Anyway?" Videodisc/Teletext. Fall, 1982. v.2, no. 4. p. 288-294.

Cummings, Mark. "Digital Video Costs Cause Sluggish Start." Infoworld. December, 1980.

Educational and Industrial Television. "How Discs Are Used: Producing for Discs; Directory of Players." Educational and Industrial Television. v.13, no.3. March, 1981.

Goldstein, Charles M. "Optical Disc Technology and Information" Science. v.215. February 12, 1982.

Hughey, Ann. "Optical Disc Market Clouded by Questions About Benefits." Wall Street Journal. July 8, 1983. p.23.

Lachenbruch, David. "Videodiscs Go For a Triple Play." Panorama. January, 1980. p. 58-59, 83-86, 102.

Ladd, David L. "From the Curbstone: Copyright Issues in Videodisk Storage of Library of Congress Collections." Preservation and New Technology Papers. no. 1. January, 1983.

Newman, Thomas. "Videodiscs: The Emerging Picture." Museum News. v. 59, no. 4. January/February, 1981. p. 28-33.

Newman, Thomas. "Museums and Videodisc." Videodisc News. v.2, no. 1. January, 1981. p. 7-8.

Nugent, Ron. "An Overview of Videodisc Technology." Project Paper No. 4. Videodisc Design/Production Group, University of Nebraska-Lincoln, October, 1980.

Onosko, Tim. "Vision of the Future." Creative Compiling. January, 1982. p. 84-94.

Paris, Judith and Richard W. Boss. "The Care and Maintenance of Videodiscs and Players." Videodisc/Videotex. Winter, 1982. v. 2, no. 1. p. 38-46.

Pollack, Andres. "Matsushita Shows an Erasable Disk." New York Times. April 6, 1983, p. 5.

Rice, Philip and Richard F. Dubbe. "Development of the First Optical Videodisc." SMPTE Journal. March, 1982. p. 277-284.

Savage, Maria. "Beyond Film." ASIS Bulletin. October, 1980. p. 26-29.

Schrage, Michael. "Good-bye, 'Dallas,' Hello Videodiscs." New York. v. 13, no. 45. November 17, 1980. p. 38-56.

Sigel, Efrem. Video Discs: The Technology, the Applications, and the Future. New York: Knowledge Industries Publications, Inc. 1980.

Sirkin, Arlene Farber. "The Videodisc Revolution." Picturescope. v. 28, no. 3. Fall, 1980. p. 29-30.

Sneed, Charles. "The Videodisc Revolution: What's Ahead for Libraries?" Wilson Library Bulletin. November, 1980. p. 186-189, 238.

Sorkow, Janice. "Archival Storage of Visual Resources on a Videodisc: A Pilot Project." Videodisc News. v. 2, no. 3. March, 1981. p. 6-7.

Sustik, Joan M. "Art History Interactive Videodisc Project at the University of Iowa." Videodisc/Teletext. Spring, 1981. v. 1, no. 2. p. 78-85.

Video Today. Editorial Staff. "Video Discs Decoded: How They Work and Differ." Video Today. December, 1980. p. 4-9, 15.

White, Robert M. "Disk-Storage Technology." Scientific American. August, 1980. p. 138-148.

Journals with frequent articles on videodisc technology:

Videodisc/Teletex:	Microfilm Review Inc. 520 Riverside Avenue P.O. Box 405 Saugatuck Station Westport, CT 06880
Videodisc News:	Videodisc Services, Inc. P.O. Box 6302 Arlington, VA 23206
Optical Memory Newsletter:	Edward S. Rothchild, publisher P.O. Box 14817 San Francisco, CA 94114-0817